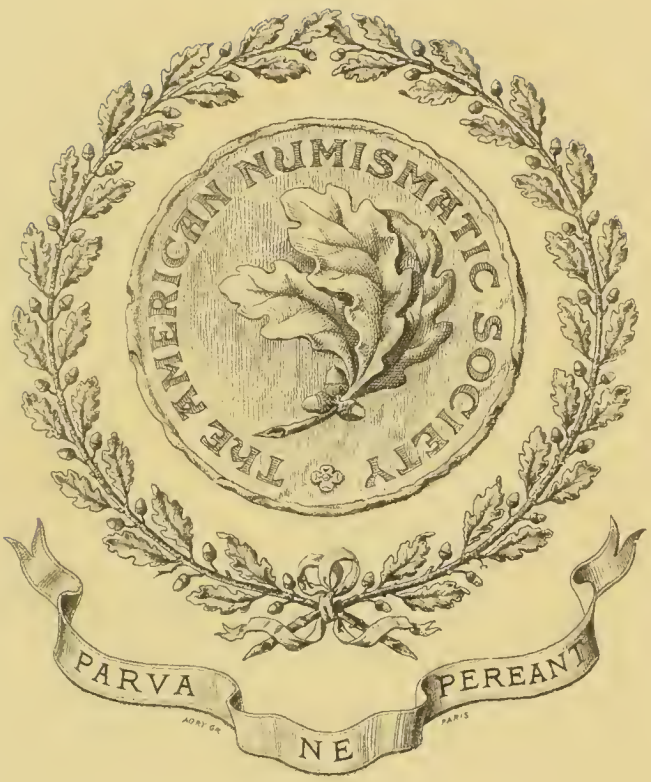
#128



W. Elliot Woodward's

FIFTY-FIRST SALE.

The Stone Age

IN

America & Europe.

The Spang Collection.

OCTOBER 19 and 20, 1882.

WORKS OF PRE-HISTORIC MAN.

CATALOGUE

OF THE

Finest Specimens from the Cabinet of

Mr. NORMAN SPANG,

OF ETNA, PENNSYLVANIA.

ILLUSTRATING

The Stone Age

IN AMERICA AND EUROPE.

To be Sold by Auction,

By Messrs. BANGS & CO.

739 & 741 Broadway, New York City,

On THURSDAY and FRIDAY, October 19, 20, 1882.

THE ARTICLES WILL BE ON EXHIBITION ON TUESDAY AND WEDNESDAY, OCTOBER 17, 18, AT TEN O'CLOCK, A. M., AND THE SALE WILL BEGIN EACH DAY AT TWO O'CLOCK, P. M. ORDERS FOR THE SALE WILL BE EXECUTED BY THE AUCTIONEERS AND BY ALL COIN DEALERS.

Catalogue by W. Elliot Woodward.

BOSTON:

T. R. MARVIN & SON, NUMISMATIC PRINTERS.

1882.

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CATALOGUE.

THE STONE AGE IN AMERICA.

SPEAR HEADS AND ARROW POINTS.

The following, Nos. 1 to 100, inclusive, are selected from a vast number in Mr. Spang's Collections, for the purpose of illustrating varieties of form and material as found in various localities. All are accurately labeled or numbered with reference to labels, and all are perfect, with a few slight exceptions.

1 Spear Point, Oneida Co., N. Y.; dark flint. 4¼ x 1¾.

2 Arrow Points, N. Y.; triangular, with hollowed base, various localities. 5 pieces.

3 Arrow Points, N. Y.; jasper, obsidian, &c. 4 pieces.

4 Arrow Points, Chester Co., Pa.; large and small, superior lot. 12 pieces.

5 Arrow Points, of white quartz, Chester Co., Pa.; very fine. 8 pieces.

6 Barbed Arrow Point, Munroe Co., Pa. 2¼ inches.

7 Arrow Points, Pa.; one of beautiful leaf-shape, quartz, *rare*. 4 pieces.

8 Arrow Points, Pa.; various localities, fine lot. 5 pieces.

9 Quartz Arrow Points, Pa.; one with parallel sides and notched base, a form that I have never before met with; fine. 4 pieces.

10 Spear Point, N. C.; of rare striped stone. 3¾ inches.

11 Spear Point, N. C.; beautiful ferruginous quartz. 4⅛ x 1¾.

12 Spear Points, N. C.; material like the last, all fine. 3 pieces.

13 Spear Head, Alexander Co., N. C.; stemmed, unusually large and fine. 4¾ x 2.

14 Spear Point, Mo.; barbed and stemmed, very fine. 4x2¼.

15 Spear Point, N. C.; reddish quartz, stemmed, with hollow base; very fine. 4¼ x 1¾.

16 Spear Head, N. C.; rare variegated stone, fine. 3¼.

17 Spear Head, N. C.; milky quartz, fine. 3¼.

18 Spear Head, N. C.; shield shape, with stem. 2⅛ x 1½.

19 Spear Head; elliptical, with stem, rare form. 4½ x 1¾.

20 Spear Head, N. C.; semi-elliptical, thick in the middle but thin at the base; very fine. 3½ x 1½.

21 Spear Head, N. C.; barbed, with narrow point; very fine. 3¼.

22 Spear Head, N. C.; yellow quartz, sides nearly parallel, point triangular, fine, and a *very rare form*. 23.

23 Arrow Heads, N. C.; quartz, triangular, with hollowed base: very fine. 2 pieces.

24 Spear Heads, N. C.; milky quartz, perfect, and very handsome. 3 pieces.

25 Arrow Heads, N. C.; barbed, notched, &c., white quartz. 5 pieces.

26 Arrow Points, N. C.; serrated, various forms, fine and *rare lot*. 5 pieces.

27 Arrow Points, N. C.; different, all fine. 4 pieces.

28 Arrow Point of transparent crystal, very beautiful.

29 Arrow Points, N. C.; small size, unusual form. 3 pieces.

30 Arrow Points, Ga.; one serrated and of irregular form, another, long, triangular, and another of quartz crystal, rotary, an unusual form in quartz. 4 pieces.

31 Barbed Spear Head, Ga., with narrow point, broad base, serrated. 2¾ x 1¾.

32 Arrow Point, Ala.; variegated jasper, fine.

33 Spear Head, Ky.; notched, with rounded smooth base, very fine. 3½ x 1½.

34 Spear Head, Ky.; serrated, base expanding, hollowed and thin; very fine. 3¾.

35 Spear Head, Ky.; serrated, beveled and rotary, with broad base, *rare form*, perfect. 5⅛ x 1¼.

36 Arrow Points, Ky.; perfect. 2 pieces.

37 Spear Point, Ark.; barbed. 2¾.

38 Spear Point, Ark.; rounded base. 3½.

39 Arrow Point, Ark.; jasper, &c., fine. 4 pieces.

40 Spear Point, Tenn.; notched, with rounded smooth base; fine. 3½.

41 Spear Head, Tenn.; narrow, with hollowed base. $4\frac{1}{4}$ x 1.

42 Spear Head, Tenn.; curved and serrated, and of irregular form, the stem oblique to the point, one barb a little broken. $3\frac{1}{4}$ x $1\frac{1}{4}$.

43 Spear Point, Tenn.; curved and rotary, singular form, fine. $6\frac{1}{8}$ x $1\frac{1}{4}$.

44 Spear Point, Tenn.; barbed and beautifully serrated, perfect. $3\frac{1}{8}$ x $1\frac{3}{4}$.

45 Spear Head, Tenn.; nearly as fine as the last. $3\frac{1}{8}$ x $1\frac{1}{4}$.

46 Spear Head, Tenn.; notched, with smooth base, semi-elliptical; very fine. $3\frac{1}{4}$ x $1\frac{1}{4}$.

47 Spear Head, Tenn.; stemmed, barbed and rotary, fine. $4\frac{3}{4}$ x $1\frac{1}{4}$.

48 Spear Head, Tenn.; curved, fine. $3\frac{1}{2}$ x $1\frac{1}{2}$.

49 Spear Head, Tenn.; rotary, very thick and narrow. $5\frac{1}{4}$ x $1\frac{1}{4}$.

50 Fish Spear, Tenn.; jasper, serrated, fine. 3.

51 Spear Head, Tenn.; jasper, broad ovate, chipped, fine.

52 Spear Head, Tenn.; curved, stemmed, fine. $3\frac{1}{2}$ x $1\frac{1}{2}$.

53 Spear Head, Tenn.; broad, rounded base, fine. $2\frac{1}{2}$.

54 Broad Arrow Points, Tenn.; a fine lot. 6 pieces.

55 Fish Spears, Tenn.; all fine. 4 pieces.

56 Arrow Points, Tenn.; broad, triangular, leaf-shape, war point, &c., fine. 5 pieces.

57 Arrow Points, Tenn.; all serrated, a fine and remarkable lot. 8 pieces.

58 Spear Head, Tenn.; beveled, rotary, with rounded base. $4\frac{1}{2}$ x $1\frac{1}{4}$.

59 Spear Head, with rounded point; atttention is called to the remarkable chipping on this implement; it equals in delicacy the finest work on any of the Scandinavian implements.

60 Arrow Points and Bunts, Tenn.; all marked varieties, and very fine. 10 pieces.

61 Spear Points, Tenn.; semi-elliptical, with stem; fine. $2\frac{1}{2}$.

62 Arrow Points, Tenn.; thick, with broad bevel at each edge; very fine. $2\frac{1}{2}$.

63 Arrow Point, Tenn.; serrated, beveled and rotary; fine.

64 Arrow Point, Tenn.; curved, almost bow-shape, singular form.

65 Spear Point, Tenn.; remarkable form, expanding towards the point.

66 Spear Point, Tenn.; variegated jasper, point gone. $2\frac{1}{4}$.

67 Spear Head, Tenn.; curious parti-colored stone. $2\frac{1}{4}$.

68 Spear Head, Tenn.; barbed, parti-colored stone. $3\frac{1}{2}$ x 2.

69 Spear Head, Tenn.; narrow stem. $3\frac{1}{2}$ x $\frac{7}{8}$.

70 Spear Head, Tenn. 3.

71 Spear Head, Mo.; of light stone resembling feldspar. 5 x $1\frac{3}{8}$.

72 Spear Head, Mo.; serrated, semi-elliptical, contracting sharply towards the base, which is hollowed; very fine. $4\frac{3}{4}$ x $1\frac{1}{2}$.

73 Spear Head, Mo.; leaf-shaped, serrated; a beautiful specimen. $4\frac{1}{4}$ x $1\frac{1}{4}$.

74 Spear Head, Tenn.; elliptical, with base truncated; very fine. $5\frac{1}{2}$ x $1\frac{1}{2}$.

75 Spear Head, Tenn.; semi-elliptical, with expanding base; fine. $5\frac{1}{2}$ x $1\frac{1}{2}$.

76 Spear Head, Mo.; with square, thin base; fine. $3\frac{3}{4}$ x $1\frac{1}{4}$.

77 Spear Head Mo.; of light stone, elliptical, with base truncated. $3\frac{3}{4}$.

78 Spear Head, Mo.; deeply notched, base rounded and smooth; very fine. $4\frac{5}{8}$ x $1\frac{1}{2}$.

79 Spear Head, Mo.; rounded base. 4 x $1\frac{1}{4}$.

80 Spear Head, Mo.; notched, base round and smooth; fine. 5 x $1\frac{1}{2}$.

81 Spear Head, Mo.; flesh-colored feldspar, shield-shape, notched, with very broad base; fine workmanship. $2\frac{3}{4}$ x $1\frac{1}{2}$.

82 Spear Head, Mo.; sides nearly parallel, expanding towards the base, base and sides notched, rotary, *rare form;* fine. 5 x $1\frac{1}{2}$.

83 Spear Head, Mo.; deeply notched, with broad rounded base; fine. 3 x $1\frac{1}{2}$.

84 Spear Head, Mo.; shield-shape, rounded base; very fine. 3 x $2\frac{1}{4}$.

85 Spear Head, Mo.; light feldspar. $1\frac{1}{4}$ x 2.

86 Spear Head, Mo.; shield-shape, fine. $2\frac{1}{4}$ x $1\frac{3}{4}$.

87 Spear Head, Mo.; of dark stone; fine. $4\frac{1}{4}$ x 2.

88 Spear Head, Mo.; expands near the barb, base rounded, a particle of the point gone; very fine. 5 x $1\frac{3}{4}$.

89 Spear Head, Mo.; elliptical, with hollowed base, serrated on each side in a manner quite different from any I have before observed; I think it *a most rare* example. 3 x $1\frac{1}{8}$.

90 Spear Head, Mo.; barb expanding. $2\frac{3}{4}$ x $1\frac{3}{4}$.

91 Spear Head, Mo.; of light stone, fine workmanship. $4\frac{1}{2}$ x 2.

92 Spear Head, Mo.; rotary; fine. $3\frac{7}{8}$ x $1\frac{3}{4}$.

93 Spear Head, Mo.; twisted; very fine. $4\frac{1}{2}$ x $1\frac{1}{2}$.

94 Spear Head, O.; curved and rotary, broadly expanding at the base; *rare form.* 3 x $1\frac{3}{4}$.

95 Spear Head, O.; semi-elliptical, square base; fine. 5 x $1\frac{7}{8}$.

96 Spear Head, O.; lozenge-shape, with narrow stem, *unique form;* very fine. $3\frac{1}{4}$ x $2\frac{1}{8}$.

97 Broad Spear Head, O.; pointed ovate, of excellent work, and perfect. $4\frac{1}{2}$ x $2\frac{1}{2}$.

98 Spear Head, O.; leaf-shape; very fine. 3 x $1\frac{1}{2}$.

99 Spear Head, O.; very short stem; perfect. $3\frac{1}{4}$ x $1\frac{1}{2}$.

100 Spear Head, O.; large size; fine. 5 x $1\frac{3}{4}$.

CELTS, ETC.

Under this head will be found representative examples of all those implements, usually designated ungrooved axes, chisels, wedges, fleshers, skinners, peelers, tomahawks, etc., the various forms of which merge into each other to such a degree, that it is very difficult to make an accurate classification under the various names, and it is by no means certain, but on the contrary quite unlikely, that the various forms were used as indicated by their common names; it is more probable that a single implement answered for many purposes, as nearly all of this class here described, it will be seen on examination, are adapted to any of the uses indicated by the preceding names.

Next to the arrow point, the celt in some one of its forms is far more common than any other pre-historic implement in stone. Mr. Spang's collection comprised upwards of two hundred and fifty. The following are selected, first, for beauty and perfection; second, for difference of locality and variety of material, and not one of the lot but has some special claim to attention.

101 Celt, Auburn, N. Y.; sandstone, side a little chipped. 4 x $1\frac{3}{4}$.

102 Celt, Oneida Co., N. Y.; thick and nearly square, sides and flats tapering towards the point. $4\frac{1}{4}$ x $1\frac{1}{4}$.

103 Celt from an island in the Susquehanna River, near Lancaster, Pa.; very ancient; fine. $7\frac{3}{4}$ x $2\frac{3}{4}$.

104 Celt, Chester Co., Pa.; edge oblique to the side, sides expanding. $4\frac{1}{2}$ x $2\frac{1}{2}$.

105 Celt, Hocking Co., O.; oval in form, with edges grooved longitudinally, granite, perfect and a most rare form. $6\frac{3}{4}$ x 3.

106 Celt, O.; oblong; very fine. $4\frac{1}{4}$ x $2\frac{1}{4}$.

107 Celt, O.; form like the last; equally fine. $4\frac{3}{4}$ x $2\frac{1}{4}$.

108 Celt, near Columbus, O.; dark-colored mottled stone: extremely fine. $5\frac{1}{2}$ x $2\frac{1}{2}$.

109 Celt, O.; finely finished, nearly polished. $5\frac{1}{2}$ x $2\frac{1}{4}$.

110 Celt, Hocking Co., O.; round and wedge formed, granite; very fine. $5\frac{1}{4}$ x 2.

111 Celt, Hocking Co., O.; dark stone, oblong, expanding in the middle, polished and perfect: a rare example. $4\frac{1}{2}$ x $2\frac{1}{2}$.

112 Celt, O.; ovate; very fine. $4\frac{1}{4}$ x $2\frac{1}{4}$.

113 Celt, O.; fine. $4\frac{3}{4}$ x $1\frac{1}{4}$.

114 Celt, O.; polished, but top broken by use: very fine. 4 x $2\frac{1}{4}$.

115 Celt, O.; slate, thin, oblong; very fine. $3\frac{1}{2}$ x 2.

116 Celt, O.; of grayish granite, thick, polished edge; very fine and of uncommon form. $6\frac{1}{4}$ x $2\frac{1}{2}$.

117 Celt, Hocking Co., O.; sandstone, fine form and perfect. 4 x $2\frac{1}{4}$.

118 Celt, near Columbus, O.; light granite, ovoid; very fine. $4\frac{1}{2}$ x $2\frac{1}{2}$.

119 Celt, Louisa Co., W. Va.: top nearly pointed; very fine. $4\frac{1}{2}$ x $1\frac{3}{4}$.

120 Celt, W. Va.; a nearly exact duplicate of No. 116; equally fine. $6\frac{1}{2}$ x $2\frac{1}{2}$.

121 Celt, W. Va.; oblong; fine. $5\frac{3}{4}$ x $2\frac{1}{4}$.

122 Celt, W. Va.; granite, thin, with expanding edge: very fine. $3\frac{1}{2}$ x 2.

123 Celt, Mich.; dark stone, partly polished, head shows signs of use.

124 Celt, Mich.; fine, polished. $3\frac{3}{4}$ x 2.

125 Celt, O.; dark stone, head rounded; fine. $7\frac{1}{2}$ x $2\frac{3}{4}$.

126 Celt, N. C.; expanded edge tapering towards the head, which shows marks of use; fine. $5\frac{1}{2}$ x $2\frac{1}{4}$.

127 Celt, Mitchell Co., N. C.; edge broadly expanded, top nearly pointed, of light stone; very fine and handsome and of unusual size. 9 x 3.

128 Celt, Mitchell Co., N. C.; nearly triangular, edge polished and broadly expanding, top nearly pointed; a rare form and very fine indeed. $6\frac{3}{4}$ x $3\frac{1}{4}$.

129 Celt, Clay Co., N. C.: granite, oval, fine; a scarce form. $4\frac{1}{2}$ x 3.

130 Celt, N. C.; polished, small size and very fine. $2\frac{3}{4}$ x $1\frac{1}{2}$.

131 Celt, Macon Co., N. C.; same form as No. 128; fine. $4\frac{1}{2}$ x $2\frac{3}{4}$.

132 Celt, Iredell Co., N. C.; washed out from an Indian grave, round, expanding edge; very fine. $5\frac{1}{2}$ x $1\frac{3}{4}$.

133 Celt, Swaine Co., N. C.; flat, thin, thicker towards the head, perfect; rare form. $4\frac{3}{4}$ x $1\frac{3}{4}$.

134 Celt, Macon Co., N. C.; light-grayish material, elongated oval, flat; perfect. $5\frac{1}{2}$ x $2\frac{1}{2}$.

135 Celt, Swaine Co., N. C.; expanding edge, rounded and nearly pointed head; closely resembles the form usually found in Ireland, edge slightly chipped but very fine. 5 x $2\frac{1}{4}$.

136 Celt, Macon Co., N. C.; in form like the ordinary iron curved Indian tomahawk, fine; *very rare*. 5 x $2\frac{1}{2}$.

137 Celt, Mitchell Co., N. C.; long, narrow, with polished edge; fine. $5\frac{1}{2}$ x $1\frac{3}{4}$.

138 Celt, Swaine Co., N. C.; sandstone; very fine. 5 x 2.

139 Celt, Macon Co., N. C.; oval, head flat; perfect. 6 x $2\frac{1}{2}$.

140 Celt, Swaine Co., N. C.; oval, flat, top brought nearly to an edge; very fine. $5\frac{3}{4}$ x $3\frac{1}{4}$.

141 Celt, Clay Co., N. C.; very broad edge, top much narrowed, light granite; very fine. 7 x $3\frac{7}{8}$.

142 Celt, Clay Co., N. C.; polished, with expanding edge, top chipped by use; very fine. $4\frac{1}{4}$ x 2.

143 Celt, Iredell Co., N. C.; washed out with human bones from the banks of the Catawba River; fine. $3\frac{3}{4}$ x $1\frac{3}{4}$.

144 Flat Celt, Clay Co., N. C.; one side square, the other beveled; very fine. $3\frac{1}{4}$ x $1\frac{3}{4}$.

145 Celt, Swaine Co., N. C.; light granite, flat, broad edge; fine. $5\frac{1}{4}$ x 3.

146 Celt, Martin Co., Ky.; rounded flats, sides nearly square, head oblong, polished, edge slightly chipped or would be perfect; diorite. $5\frac{1}{2}$ x 3.

147 Celt, Cumberland Co., Ky.; fine. $4\frac{1}{4}$ x $2\frac{1}{4}$.

148 Celt, Cumberland Co., Ky.; triangular; light granite, fine. $3\frac{3}{4}$ x $2\frac{1}{4}$.

149 Celt, Martin Co., Ky.; very ancient. $4\frac{1}{4}$ x $2\frac{1}{4}$.

150 Celt, Meade Co., Ky.; fine. $4\frac{1}{4}$ x $1\frac{1}{4}$.

151 Celt, Cumberland Co., Ky.; ovoid, with flat top; fine. $3\frac{3}{4}$ x $2\frac{1}{4}$.

152 Celt, Cumberland Co., Ky.; polished, top rounded: very fine. $3\frac{1}{4}$ x $2\frac{1}{4}$.

153 Celt, Meade Co., Ky.; light granite; fine. $3\frac{1}{4}$ x $1\frac{1}{2}$.

154 Celt, Bledsoe Co., Tenn.; of bluish slate, perfect; the largest American Celt I have ever met with, weighing $5\frac{1}{2}$ lbs. $11\frac{3}{4}$ x $3\frac{3}{4}$.

155 Celt, Putnam Co., Tenn.; washed from a grave on Cauliflower Creek, flats and sides rounded, expanding edge, head contracted nearly to a point, handsomely polished; material, dark-striped stone of great hardness; for perfection and beauty it would be very difficult to match this celt. $9\frac{3}{4}$ x 3.

156 Celt, Lincoln Co., Tenn.; sides and flats rounded, gradually contracting to near a point at the top; perfect and a very uncommon form. $8\frac{1}{4}$ x $2\frac{1}{4}$.

157 Celt, Big Island, Tennessee River, Tenn.; in form resembles the last, but more flattened; very fine. 8x$2\frac{1}{4}$.

158 Celt, Lincoln Co., Tenn.; this handsome polished implement reminds one at once of the form prevailing in the West Indies, supposed to be of Carib workmanship; perfect and rare. $7\frac{1}{4}$ x $2\frac{3}{4}$.

159 Celt, Tenn.; resembles the last in form, pecked over the whole surface except the edge, which is polished; very fine. $9\frac{1}{2}$ x $2\frac{1}{2}$.

160 Celt, Mich.; granite, very fine. $7\frac{1}{2}$ x $2\frac{7}{8}$.

161 Celt, Mich.; of dark stone, polished, perfect. 5 x $2\frac{5}{8}$.

162 Celt, Marion Co., Tenn.; polished, slightly chipped; fine. $4\frac{1}{4}$ x $1\frac{1}{2}$.

163 Celt, Livingston Co., Tenn.; this celt is of peculiar shape, the sides slightly contracting just above the edge. I have never seen another example of precisely the same form; head slightly chipped; v. fine. 4x$2\frac{1}{2}$.

164 Celt, Rhea Co., Tenn.; double-edged, perfect and *very rare*. $3\frac{1}{4}$ x $1\frac{1}{4}$.

165 Celt, Rhea Co., Tenn.; fine. $3\frac{1}{2}$ x $1\frac{3}{4}$.

166 Celt, Lincoln Co., Tenn.; dark stone, round, top shows wear, polished; fine. 5 x $1\frac{1}{2}$.

167 Celt, Rhea Co., Tenn.; round, edge oblique and expanding, rare form; very fine. $6\frac{1}{2}$ x $2\frac{3}{4}$.

168 Celt, Lincoln Co., Tenn.; flat, polished, slightly winding or spiral; fine. $6\frac{1}{4}$ x $2\frac{1}{4}$.

169 Celt, Rhea Co., Tenn.; slate, double-edged, the narrower edge chipped; fine. $5\frac{1}{2}$ x $1\frac{3}{4}$.

170 Celt, Marion Co., Tenn.; cutting edge at both ends: fine and *rare*. $3\frac{1}{4}$ x $1\frac{1}{4}$.

171 Celt, Sulphur Creek, Tenn.; dark, granitic rock; perfect. 4 x 2½.

172 Celt, Rhea Co., Tenn.; fine. 4¼ x 2.

173 Celt, Rhea Co., Tenn.; somewhat chipped, still fine. 7¼ x 2½.

174 Celt, Lincoln Co., Tenn.; light granite, broad and thin, sides square; very fine. 6½ x 3¾.

175 Celt, Habersham Co., Ga.; sandstone, rounded, flat; fine. 6 x 2½.

176 Celt from a mound, Clinton Co., Ill.; dark fine-grained granite, perfect. 6¼ x 3.

177 Celt, Jo Daviess Co., Ill.; of dark fine-grained granite; one side is covered with a light-colored patina, a film of stony hardness; very fine, *rare*. 6_ x 3¼.

178 Celt, Montgomery Co., Ark.; partly polished and partly chipped, perfect. 8¾ x 3½.

179 Celt, Franklin Co., Mo.; fine. 4¾ x 1¾.

180 Celt, Mo.; fine. 3½ x 2.

181 Celt, Mo.; polished; fine. 4½ x 1¾.

182 Celt, Fremont Co., Iowa; very fine. 4¾ x 2.

183 Celt, Mills Co., Iowa; expanding edge, top nearly pointed; fine. 3½ x 2.

GROOVED AXES AND HAMMERS.

Selected with reference to perfection of condition, quality and style of workmanship, and diversity of material and location; the best specimens in a collection of nearly three hundred.

184 Grooved Axe, N. Y.; found near Garden City, Long Island; perfect. 7¼ x 4¾.

185 Grooved Axe, Bucks Co., Pa.; sandstone groove near the head. the top has several ancient breaks showing use as a hammer; fine. 7½ x 3⅛.

186 Grooved Axe, Chester Co., Pa.; of large size and uncommon form; fine. 8 x 4.

187 Grooved Axe, Chester Co., Pa.; light mottled-granite, groove oblique to the head; very fine. 6¼ x 4.

188 Grooved Axe, Allegheny Co., Pa.; smooth and elegantly wrought, edge a trifle chipped; very fine. 5½ x 3¼.

189 Grooved Axe, Pa.; lozenge-shape, fine and an uncommon form. 5¼ x 3¾.

190 Grooved Axe, Pa.; small, head much contracted; *rare form.* 4 x $2\frac{1}{4}$.

191 Grooved Axe, Marshall Co., W. Va.; narrow and thin, with prominent ridge below the groove; symmetrical and very fine. $6\frac{1}{2}$ x $2\frac{3}{4}$.

192 Grooved Axe, Mitchell Co., N. C.; broad groove, with ridge below; fine. 7 x 5.

193 Grooved Axe, Flat Creek, Mitchell Co., N. C.; material, iron limestone. This axe, which was nearly square, with the head contracted, and a heavy ridge below the groove, shows an ancient fracture of the edge and a small break at the top; it is finely wrought and of most uncommon form. 8 x 6.

194 Grooved Axe, Iredell Co., N. C.; of bluish stone, edge a little chipped. $7\frac{1}{4}$ x 4.

195 Grooved Axe, Mitchell Co., N. C.; large groove, with ridge below, head contracted and rounded; very fine. $6\frac{1}{2}$ x $3\frac{3}{4}$.

196 Grooved Axe, Alexander, N. C.; beautifully wrought, edge chipped; fine. $5\frac{1}{2}$ x $3\frac{3}{4}$.

197 Grooved Axe, Mitchell Co., N. C.; one side grooved longitudinally, edge a little chipped, finely wrought. $5\frac{1}{2}$ x 3.

198 Grooved Axe, N. C.; nearly oval, a trifle chipped, still fine. $5\frac{1}{2}$ x 4.

199 Grooved Axe, Macon Co., N. C.; thin, head pointed and triangular; dark slate. $5\frac{3}{4}$ x $2\frac{1}{2}$.

200 Grooved Axe, Macon Co., N. C.; very good. $4\frac{1}{2}$ x $3\frac{3}{4}$.

201 Grooved Axe, N. C.; head round, narrowing towards the point; very fine. 5 x $3\frac{1}{4}$.

202 Grooved Axe, Macon Co., N. C.; thick, head contracted and flattened at the top; fine. $5\frac{1}{2}$ x $3\frac{1}{4}$.

203 Grooved Axe, Swaine Co., N. C.; very ancient, coarse yellow sandstone, a little chipped but fine. $5\frac{1}{2}$ x $3\frac{3}{4}$.

204 Grooved Axe, N. C.; shows ancient chipping of the edge; fine. 6 x $4\frac{1}{2}$.

205 Grooved Axe, Mitchell Co., N. C.; projections at the sides above and below the groove; very good. 7 x 4.

206 Grooved Axe, Clay Co., N. C.; very good. $5\frac{1}{4}$ x $3\frac{1}{2}$.

207 Grooved Axe, Swaine Co., N. C.; very old, good. $4\frac{1}{4}$x3.

208 Grooved Axe, N. C.; of small size; very good. $3\frac{3}{4}$x$2\frac{1}{2}$.

209 Grooved Hammer, N. C.; marks of ancient use are prominent. 4 x $2\frac{3}{4}$.

210 Grooved Axe, Swaine Co., N. C.; round, with conical head; of metamorphic slate, *rare form and material;* perfect. $4\frac{1}{4} \times 1\frac{3}{8}$.

211 Grooved Axe, Swaine Co., N. C.; finely made and perfect. $4 \times 3\frac{1}{2}$.

212 Grooved Axe, Macon Co., N. C.; good. $3\frac{1}{2} \times 2\frac{1}{2}$.

213 Grooved Axe, Mitchell Co., N. C.; by long use worn nearly to the groove; fine. $4 \times 3\frac{3}{4}$.

214 Grooved Axe, Clay Co., N. C.; small; very fine. $3 \times 2\frac{1}{4}$.

215 Grooved Axe, Maury Co., N. C.; toy-size. $2\frac{1}{2} \times 2$.

216 Grooved Axe, Ark.; edge narrowed nearly to a point; good. $5\frac{1}{4} \times 2\frac{3}{4}$.

217 Grooved Axe, Rhea Co., Tenn.; deep groove, thin and of uncommon length; perfect. $10 \times 4\frac{1}{4}$.

218 Grooved Axe, Tenn.; edge comes to a rounded point; fine. $8\frac{1}{4} \times 4\frac{3}{8}$.

219 Grooved Axe, Tenn. This axe when dry weighs about 12 oz., immersed in water it absorbs immediately a sufficient quantity to increase its weight to 16 oz.; a piece broken from the head, otherwise fine. $5\frac{3}{4} \times 3\frac{1}{8}$.

220 Grooved Axe, Sullivan Co., Tenn.; longitudinal groove at one side; very fine. $6\frac{3}{4} \times 4\frac{1}{4}$.

Stone axes, as all collectors are aware, are frequently met with having one side square or a groove lengthwise. It is generally supposed that this form was adopted to facilitate the hafting of the implement by furnishing a proper bearing for a wedge with which it was secured in the handle; the groove in this specimen follows the curved outline of the axe, and seems but poorly adapted for the purpose indicated.

221 Grooved Axe, Tenn.; grooved all round, perfect. $5\frac{1}{4} \times 3\frac{1}{8}$.

222 Grooved Axe, Tenn.; large projection above and below the groove, head broad, flattened and hollowed, shows marks of ancient secondary work over nearly its whole surface; fine. $4\frac{1}{2} \times 4$.

223 Grooved Axe, Bledsoe Co., Tenn.; nearly cylindrical; very fine. $6\frac{1}{4} \times 2\frac{1}{8}$.

224 Grooved Axe, Tenn.; same location, and form resembling the last; very good. $3\frac{3}{4} \times 2$.

225 Grooved Axe, Tenn.; groove so deep as to remove three-quarters of the substance of the axe, an uncommon form, head chipped. $4\frac{1}{4} \times 2\frac{3}{4}$.

226 Grooved Axe, Rhea Co., Tenn.; fine. $3\frac{1}{2} \times 2\frac{1}{4}$.

227 Grooved Axe, Tenn.; fine. $3\frac{1}{4} \times 2$.

228 Grooved Axe, Bledsoe Co., Tenn.; irregular and uncommon form. $3\frac{3}{4}$ x $2\frac{3}{4}$.

229 Grooved Axe, Tenn.; small size; fine. 4 x $2\frac{1}{8}$.

230 Grooved Axe, Tenn.; head rounded, perfect. $5\frac{1}{4}$ x 3.

231 Grooved Axe, Pulaski Co., Ky.: one side and top flat, a trifle chipped; fine. $5\frac{1}{4}$ x $4\frac{1}{4}$.

232 Grooved Axe, Cumberland Co., Ky.; of light granite, very fine. $3\frac{1}{2}$ x $2\frac{1}{2}$.

233 Grooved Axe, Cooper Co., Mo.; polished and of elegant form; very fine. $4\frac{1}{2}$ x 3.

234 Grooved Axe, Cooper Co., Mo.: the head badly broken, but of beautiful form and finish. $4\frac{3}{4}$ x 3.

235 Grooved Axe, Franklin Co., Mo.; polished and of excellent form; very fine. $3\frac{3}{4}$ x $2\frac{1}{2}$.

236 Grooved Axe, Franklin Co., Mo.; deeply grooved, head contracted and much to one side, slightly chipped; fine. $4\frac{1}{2}$ x $3\frac{1}{4}$.

237 Grooved Axe, Cooper Co., Mo.; one side grooved, the other flat, a peculiar form, edge a trifle chipped; fine. $3\frac{3}{4}$ x 3.

238 Grooved Axe, Mo.; polished, perfect. $4\frac{1}{2}$ x $3\frac{1}{4}$.

239 Grooved Axe, Mo.; very fine. $3\frac{3}{4}$ x $3\frac{1}{4}$.

240 Grooved Axe, Mo.; one side flat; very fine. $4\frac{3}{4}$ x 3.

241 Grooved Axe, Mo.; head a little chipped; fine. $4\frac{1}{2}$ x $2\frac{3}{4}$.

242 Grooved Axe, Franklin Co., Mo.; very fine. 6 x $4\frac{1}{4}$.

243 Grooved Axe, Franklin Co., Mo.; of unusual size; very fine, weighs 7 lbs. $8\frac{1}{2}$ x 5.

244 Grooved Axe, Mo.; head narrowed and elongated; very fine. $4\frac{1}{2}$ x $2\frac{1}{2}$.

245 Grooved Adze, Clinton Co., Ill.; dark granite, very fine, and a *rare form*. $5\frac{3}{4}$ x 3.

246 Grooved Axe, Clinton Co., Ill.; sides square, edge a little chipped; very good. $3\frac{1}{2}$ x $2\frac{1}{2}$.

247 Grooved Axe, Ind.; light granite, fine. $8\frac{1}{2}$ x $3\frac{1}{2}$.

248 Grooved Axe, Preble Co., O.; both sides hollowed lengthwise; light granite, very fine. 4 x $2\frac{1}{2}$.

249 Grooved Axe, O.; edge nearly pointed; fine. 4 x $2\frac{1}{2}$.

250 Grooved Axe, Adams Co., O.; granite, good. $3\frac{3}{4}$ x 3.

251 Grooved Axe, O.; of dark syenite, deep groove, flat at top and one side; perfect. $6\frac{1}{4}$ x $4\frac{3}{4}$.

252 Grooved Axe, O.; light granite, much weathered, perfect. $7\frac{1}{2}$ x $4\frac{1}{4}$.

253 Grooved Axe, Buffalo Co., Wis.; of dark granite, oblong in form, polished and perfect. One of the finest that I have ever seen. 6 x $3\frac{1}{2}$.

254 Grooved Axe, Pa.; narrow, much elongated and curving inward; very uncommon form; fine. $9\frac{1}{2}$ x $3\frac{1}{2}$.

255 Grooved Axe, Pa.; shows marks of secondary working over much of its surface, dark stone; very fine. 10x4.

256 Grooved Axe, supposed to be from Pa., but of a Western type, perfect; an unusual example. $8\frac{1}{2}$x$4\frac{3}{4}$.

257 Grooved Axe, Richland Co., O.; of dark stone, with a curious vein of quartz running through it. $4\frac{3}{4}$ x $3\frac{1}{4}$.

258 Grooved Axe, Loudenville, O.; of metamorphic slate, rare material, perfect. $5\frac{1}{2}$ x $3\frac{1}{4}$.

259 Grooved Axe, O.; of dark granite, much weathered, but perfect. 5 x $3\frac{3}{4}$.

260 Grooved Axe, Pa.; groove oblique to the edge; fine. $6\frac{1}{2}$ x $3\frac{3}{4}$.

261 Grooved Axe, Pa.; nearly oval; fine. $6\frac{1}{2}$ x 4.

262 Grooved Axe, O.; good. $4\frac{3}{4}$ x $2\frac{3}{4}$.

263 Grooved Axe, O.; small, fair. $3\frac{1}{2}$ x 2.

264 Grooved Axe, O.; groove near the top. $5\frac{3}{4}$ x $3\frac{1}{2}$.

265 Grooved Axe, O.; contracting below and expanding above the groove, scarce form; fine. $4\frac{3}{4}$ x $3\frac{1}{4}$.

266 Grooved Axe, O.; good. $3\frac{1}{2}$ x 2.

267 Grooved Axe, O.; small; fine. $3\frac{1}{2}$ x 2.

268 Grooved Axe, O.; head narrow, edge nearly pointed; fine. $6\frac{1}{2}$ x $3\frac{1}{2}$.

269 Grooved Axe, O.; groove very broad, one side flat; fine. $5\frac{3}{4}$ x $3\frac{1}{4}$.

270 Grooved Axe, O.; groove near the top; v. fine. $4\frac{1}{2}$x$2\frac{1}{4}$.

271 Grooved Axe, Gallia Co., O.; groove oblique; fine. $5\frac{1}{2}$ x 3.

272 Grooved Axe, O.; narrows towards the point; fine. $6\frac{3}{4}$ x $3\frac{5}{8}$.

273 Grooved Axe, O.; perfect. $5\frac{3}{4}$ x 3.

274 Grooved Axe, O.; good. $4\frac{1}{2}$ x $2\frac{3}{4}$.

275 Grooved Axe, O.; narrow at the edge, perfect. $5\frac{3}{4}$x$3\frac{1}{8}$.

276 Grooved Axe, O.; large groove, top and sides flat; granite. 5 x 3.

277 Grooved Axe, Mexico; diorite; groove extends all round, both sides square, unusual form, perfect. $5\frac{1}{4}$x$2\frac{5}{8}$.

278 Grooved Axe, locality unknown; very broad shallow groove; fine. $4\frac{1}{4}$ x $3\frac{1}{4}$.

279 Grooved Axe, locality unknown; of most uncommon form, grooved all round, with groove oblique to the sides as distinguished from the groove oblique to the flats; perfect, and a *most rare form.* $3\frac{1}{2}$ x 3.

280 Grooved Axe, locality unknown, but undoubtedly Western; very fine. $7\frac{1}{2}$ x 5.

281 Grooved Axe; fine. $4\frac{1}{2}$ x $2\frac{1}{4}$.

PERFORATED OBJECTS AND ORNAMENTS.

For notes concerning the various forms here described, and the names adopted, reference is made to several of my former Catalogues, particularly No. 40, page 11, and No. 48, page 19.

282 Pendant, O., dark slate; perfect. $4\frac{3}{4}$ x $2\frac{7}{8}$.

283 Pendant, Columbiana, O.; dark slate, polished, oblong and very fine. $3\frac{5}{8}$ x $1\frac{7}{8}$.

284 Pendant, Knox Co., Tenn.; elliptical, with ends truncated, purple slate, small perforation; very fine. 4 x $1\frac{3}{4}$.

285 Pendant; greenish slate, contracted at the sides, one end square, the other rounded; perfect. $4\frac{3}{4}$ x 2.

286 Pendant, Loudenville, O.; top narrow, perforation close to the end; perfect. $4\frac{3}{4}$ x $1\frac{1}{2}$.

287 Pendant, O.; the top notched with tallies, one of large size and seven smaller; the bottom has another series, 15 in number; very fine. $4\frac{1}{2}$ x $1\frac{3}{4}$.

288 Pendant, Richland Co., O.; greenish slate, top narrowed to half the width of the base, perfect and of unusual size. $7\frac{3}{4}$ x $2\frac{1}{8}$.

289 Pendant, Loudenville, O.; elliptical, pointed at both ends, striped slate; very fine. $4\frac{1}{4}$ x $1\frac{3}{4}$.

290 Pendant, Branch Co., Mich.; perforation near the centre, slate; perfect. $3\frac{1}{2}$ x $2\frac{1}{4}$.

291 Pendant, Mitchell Co., N. C.; in form this object is much like the blade of an old-fashioned chopping knive, the top being square, the sides curving inward, the edge a segment of a circle, the sides and edge notched for tallies, 18 in number, ribbon slate; of most unusual form; fine. $3\frac{5}{8}$ wide by $1\frac{7}{8}$ long.

292 Pendant, near Columbus, O.; perforation oblique; slate; fine. 4 x $2\frac{1}{8}$.

293 Pendant, Bledsoe Co., Tenn.; perforation near the broadest end; narrower end has four notches; slate. 3 x $1\frac{5}{8}$.

294 Pendant, Richland Co., O.; perforation near the centre; very fine. $3\frac{1}{2}$ x 2.

295 Pendant, O.; large perforation, purple slate; perfect. 3 x $1\frac{1}{2}$.

296 Pendant, Richland Co., O.; harpoon shape, perforated at the centre, dark slate, an undescribed form; perfect. $5\frac{3}{8}$ x $2\frac{1}{8}$.

297 Pendant, Loudenville, O.; slate, perfect. $4\frac{3}{8}$ x $1\frac{1}{2}$.

298 Pendant, Mich.; large perforation near the end, slate; perfect. 4 x $1\frac{3}{8}$.

299 Pendant, O.; bluish slate, oval, with square ends; perfect. $3\frac{3}{8}$ x $1\frac{5}{8}$.

300 Pendant, Macon Co., N. C.; form resembles the last, but more rounded, striped slate; fine. $3\frac{1}{2}$ x $1\frac{1}{2}$.

301 Pendant or perforated Celt, Algansee, Mich.; ovate, with perforation at one side near the upper end; sand-stone, perfect and an undescribed form. $3\frac{1}{4}$ x $2\frac{1}{4}$.

302 An object in form resembling the last, Mich.; perforation near the centre and one end carved in the form of a rude profile, dark stone; *very rare* and curious. $3\frac{3}{4}$ x $2\frac{3}{8}$.

303 Pendant, Swaine Co., N. C. This object is called a pendant for want of a better name; it is of mica slate, with perforation about one-third the distance from one end to the other, symmetrical in form, perfect and weighs 14 oz. $8\frac{1}{4}$ x 2.

304 Pendant, Rhea Co., Tenn.; slate; fine. $2\frac{1}{8}$ x $1\frac{3}{8}$.

305 Pendant, Breck Co., Mich.; top pointed, a trifle chipped, but good, and of uncommon form. 3 x $1\frac{5}{8}$.

306 Pendant, Mich.; purple slate, fine material and work, corners a little damaged. 4 x $2\frac{1}{8}$.

307 Pendant, Macon Co., N. C.; small perforation, soapstone, rare form. $2\frac{7}{8}$ x $\frac{7}{8}$.

308 Pendant, O.; dark slate, chipped at the top. $2\frac{3}{4}$ x $1\frac{1}{4}$.

309 Pendant, O.; notched at the broader end; good. $1\frac{7}{8}$x1.

310 Gorget, Chester Co., Pa.; end broken. 2 x $1\frac{1}{4}$.

311 Pendant, Pa.; oval, with ends square, slate; imperfect. $3\frac{1}{4}$ x 2.

312 Parts of Gorgets and Pendants; some very fine, labelled with locations. 6 pieces.

313 Gorget, Pa.; light slate, extremely fine but one end missing. $3\frac{1}{2}$ x $1\frac{3}{4}$.

314 Gorget, Oneida Valley, N. Y.; corner broken. $3\frac{1}{2}$ x $1\frac{3}{4}$.

315 Fragment of a beautiful ornament, of striped slate, from Tenn.

316 Gorget, Richland Co., O.; elliptical, with the ends squared, remarkable for size; perfect. $7\frac{1}{8}$ x $3\frac{1}{2}$.

317 Gorget, somewhat spear-shape, one end pointed, the other square, bluish slate; perfect. $8\frac{1}{2}$ x $1\frac{5}{8}$.

318 Gorget, Mich.; elliptical, slate, graceful form, symmetrical; perfect. $5\frac{1}{4}$ x $1\frac{1}{2}$.

319 Gorget, Mich.; nearly square, sides curving inward, purple slate; perfect and a *rare form*. 3 x $2\frac{5}{8}$.

320 Gorget, Loudenville, O.; striped slate, in form a pentagon, with sides curving inward, beautiful workmanship; perfect and an undescribed form. 3 x $2\frac{1}{2}$.

321 Gorget, oblong sides, and end curving inward, small perforations near together, slate; very fine. $3\frac{1}{4}$ x $1\frac{3}{4}$.

322 Gorget, Madison Co., N. Y.; in form like the last, except that the ends curve outward; very fine. 4 x $1\frac{7}{8}$.

323 Gorget, O.; oval, brought nearly to an edge all round, the edge bears 37 notches or tallies, slate; fine. $4\frac{1}{2}$ x 2.

324 Gorget, Mich.; striped slate; fine. $3\frac{1}{8}$ x $1\frac{3}{8}$.

325 Gorget, Pa., mica schist, rare material. $3\frac{5}{8}$ x $1\frac{1}{2}$.

326 Gorget, Knox Co., Tenn.; oval, one side flattened; fine. $2\frac{7}{8}$ x $1\frac{3}{8}$.

327 Gorget, Pa.; elliptical, thick in the middle; perfect. 3 x $1\frac{3}{8}$.

328 A curious object, of black slate, oblong, one end rounded, the other oblique to the sides brought to a cutting edge, Mich.; has three perforations, two near one end; perfect and an undescribed form. 4 x $2\frac{1}{8}$.

329 Ornament, Macon Co., N. C.; nearly square, one end rounded, near the other a groove extends entirely around, three perforations, one large, two small, mica slate. $3\frac{1}{4}$ x $2\frac{3}{4}$.

330 Ornament, Branch Co., Mich.; nearly heart-shape, purple slate, with three perforations. The form of this object reminds one at once of the front view of a cat's head; undescribed, perfect. $3\frac{1}{2}$ x $2\frac{3}{4}$.

331 Banner Stone, Mich., No. 225 Jenison Collection; winged, and with groove instead of perforation, one wing a little broken. 5 x $2\frac{7}{8}$.

332 Banner Stone, Mich.; in shape nearly semi-circular, one side flat, the other raised, striped slate: good and a rare form.

333 Banner Stone, Mich.; crutch head shape, both ends broken, originally very fine. $3\frac{1}{2}$ x $1\frac{1}{4}$.

334 Banner Stone, O.; form of a flattened bead, striped slate; perfect. 2 x $1\frac{5}{8}$.

335 Parts of Banner Stones from Indiana and North Carolina; two of most remarkable form, both sufficiently preserved to determine the original shape. 3 pieces.

336 Banner Stones, N. C., etc.; fragmentary. 4 pieces.

337 Ornament, Alleghany Co., Pa.; elliptical, with square ends, light, variegated stone; perfect. $4\frac{1}{4}$ x $1\frac{1}{2}$.

338 Ornament, Macon Co., N. C.; outline like the last, one side hollowed; very fine. 3 x 1.

339 Ornament, Martin Co., Ky.; sides parallel, one end brought to a sharp cutting edge, oblique and curved; perfect. 4 x $1\frac{1}{8}$.

340 Ornament, Madison Co., N. Y.; form an elongated curved oval; perfect. $3\frac{1}{4}$ x $\frac{3}{4}$.

341 Ornament, Macon Co., N. C.; semi-circular, of dark reddish stone; perfect. $2\frac{1}{2}$ x 1.

342 Ornament, Rhea Co., Tenn.; rhomboidal, with rounded edges, light sandstone; perfect. $2\frac{1}{4}$ x $2\frac{1}{4}$.

343 Ornament, Macon Co., N. C.; nearly square, thin; concave on one side, of hard quartz-like stone, finely-wrought, perfect and undescribed. $2\frac{1}{4}$ x $2\frac{1}{8}$.

344 Ornament, N. C.; elliptical, bottom flat, sandstone; perfect. $3\frac{3}{8}$ x $1\frac{1}{8}$.

345 Pendant, Clay Co., N. C.; finely wrought but wants the perforation. $1\frac{3}{4}$ x $1\frac{1}{4}$.

346 Objects, N. J.; one carved in the form of a beaver, the other a triangle; from the Ralston Collection, and labeled in Mr. R.'s hand-writing, "Sacred beaver and triangle." 3 x $1\frac{3}{8}$ and $\frac{7}{8}$ x $\frac{3}{4}$. 2 pieces.

347 Pretty ornament, of striped slate, O. $2\frac{1}{4}$ x $1\frac{1}{4}$.

348 Ornament, O.; elliptical, with square ends; perfect. $3\frac{3}{4}$ x $1\frac{1}{2}$.

349 Object, locality unknown, hard stone resembling granite, pecked over the entire surface and perforations commenced in two places; undescribed and remarkable. $10\frac{1}{2}$ x $2\frac{1}{2}$.

350 Ornaments, N. C. and N. Y.; imperfect, one with some ornamentation. 3 pieces.

351 Slate Tube, O.; ends broken. $3\frac{1}{4}$ x $1\frac{1}{4}$.

352 Tube, Milton Co., Ga.; perforation only commenced. 2 x $1\frac{3}{8}$.

353 Tube or broken pipe, Martin Co., Ind. $2\frac{1}{2}$ x $\frac{3}{4}$.

354 Tube, Richland Co., O.; dark slate; perfect. 3 x $1\frac{1}{4}$.

355 Tube, Mound Pottery, Tenn. 3 x 1.

356 Hematite Cup, Lincoln Co., Tenn.; dia. $1\frac{1}{4}$ inch.

357 Reel or Winder, Macon Co., N. C.; soapstone; fine. $2\frac{1}{4}$ x $1\frac{1}{4}$.

358 Perforated ornaments of reddish stone. 3 pieces.

359 Minute discoidal stone, Morriston, Tenn.; dia. 1 in.

360 Hemisphere or cone, Ky.; finely wrought, dia. $1\frac{1}{4}$ in.

361 Hematite Cups, probably natural formations, a little modified by working; from Indian graves in North Carolina and Tennessee. 2 pieces.

362 Hemisphere or Muller, N. C.; perfect; dia. $1\frac{1}{4}$ in.

363 Pestle-shaped object with a triangle deeply cut and two slight perforations commenced on the face; curious and *rare*. 1 x $\frac{7}{8}$.

364 Double concave object of ferruginous stone, perhaps a natural formation. $1\frac{1}{2}$ x $1\frac{3}{4}$.

365 A face, very rude, but evidently Indian, whether of stone or pottery I am uncertain. $1\frac{1}{2}$ x $1\frac{1}{4}$.

366 Banner stone or Bead, Richland Co., O.; approaches the globular form; perfect. 3 x 2.

366*a* Amulet or Bird stone, Ray, Ind.; the head of this piece bears a striking resemblance to the head of a dog, with the ears partially erect; it is probable that what appear to be ears were intended for eyes; the body triangular, the tail not raised, perforations commenced but not finished; material variegated stone resembling agate and of equal hardness; perfect. $3\frac{1}{2}$ x $1\frac{1}{2}$.

Amongst the thousands of pre-historic stone objects that have come under my observation, I have probably seen forty or fifty of the objects usually classed as amulets. Amongst them all, this particular specimen I regard, on account of its form, material and workmanship, as far more desirable than any of the others.

366*b* Amulet, in form a flattened cylinder, one end broken. 3 x $\frac{5}{8}$.

366*c* Amulet, Madison Co., N. Y.; a fragment.

366*d* Amulet, Mich.; the head only; when perfect this must have been a most remarkable piece, the length of the head being $3\frac{1}{4}$ in.

PIPES, ETC.

367 Pipe of soap stone, Mo.; barrel shape. $1\frac{3}{4}$ x $1\frac{1}{2}$.

368 Pipe, Madison Co., N. Y.; appears to be pottery, the bowl only. $2\frac{1}{2}$ x $1\frac{3}{8}$.

369 Pipe, Pa., barrel shape, highly polished; fine. $1\frac{3}{4}$ x $1\frac{1}{4}$.

370 Tube, indurated clay, Elk Co., Pa., a fragment. 2 x $1\frac{1}{4}$.

371 Pipe, O.; small; imperfect. $1\frac{3}{4}$ x $\frac{7}{8}$.

372 Pipe, N. C.; soap stone; imperfect. $1\frac{3}{4}$ x $1\frac{1}{2}$.

373 Pipes, O., small size; imperfect. 3 pieces.

374 Pipes, N. C.; fragments only. 4 pieces.

375 Pipe, Wyoming, Pa.; taken from an Indian grave; this pipe though very old, is not probably prehistoric; perfect. 6 x $3\frac{1}{4}$.

The following pipes, though some of them were taken from graves and are old, are not very ancient: those of catlinite are the work of the modern Indians.

376 Pipe, Cherokee Co., S. C.; soapstone, ornamented and beautifully finished. $1\frac{3}{4}$ x $1\frac{1}{2}$.

377 Pipe, N. C.; soapstone, the top ornamented with a bear, the bottom with an alligator; perfect. 3 x $1\frac{1}{2}$.

378 Pipe, N. C.; soapstone; perfect. $2\frac{3}{4}$ x $1\frac{3}{4}$.

379 Pipe, N. C.; on the bowl facing the smoker the bust of a woman, without drapery, on the bottom of the stem a tortoise is carved, broken and repaired; fine. $2\frac{7}{8}$x$2\frac{1}{8}$.

380 Pipe, of stone, plowed up at Wadsworth, O. This pipe, which is somewhat imperfect, is formed on the exact model of the English tobacco pipe of to-day, including the little projection at the bottom of the bowl and the slight ridge formed by the junction of the mould. $2\frac{1}{4}$ x $\frac{3}{4}$.

381 Pipe, of red catlinite; very fine, though it has been broken and cemented, base $9\frac{3}{4}$ in. long, 1 in. in diameter, bowl 3 in. high.

382 Pipe, Mich.; catlinite, ancient, base $5\frac{1}{4}$ in., bowl $2\frac{1}{2}$ in. high.

383 Pipe, Mo.; catlinite, spear-head shape, with metallic ornamentation, elaborate work, and perfect. $9\frac{1}{4}$ x $3\frac{1}{2}$.

384 Pipe, Mo.; red catlinite; the bowl of this pipe is in the form of a horse's head; a striking example of Indian workmanship. 7 x $3\frac{3}{4}$.

385 Pipe, Mo.; red catlinite; from the severity of its lines it must have been the work of some Sioux Eastlake; it is almost as ugly as an Eastlake book-case or chair; perfect. $6\frac{1}{4}$ x $3\frac{3}{4}$.

386 Pipe, Mo.; mottled catlinite, shape like a tomahawk, with metal ornamentation; perfect. $6\frac{7}{8}$ x $3\frac{1}{2}$.

387 Pipe, Mo.; mottled catlinite, dog's head. $2\frac{1}{4}$ x $2\frac{1}{2}$, with wooden stem $8\frac{3}{4}$ in. long.

388 Pipe, Mo.; catlinite, minute in size; perfect. $1\frac{1}{2}$ x $\frac{7}{8}$.

389 Pipe; modern pottery pipe, form a death's head. 2 x $2\frac{1}{2}$.

DISCOIDAL STONES.

Under this head will be found only the circular double-concave objects thus usually designated by collectors, the name Disc being applied to other objects circular in form, but with flat or convex faces. As the similarity in form of these implements indicates that they were used for the same purpose, I do not clearly see the propriety of the division in name. These objects, especially the large size double-concave ones, are so rare, that few collections, comparatively, contain a single specimen. They are certainly amongst the most attractive of pre-historic implements, on account of their graceful forms, their fine workmanship, and the great variety of handsome stones used in their manufacture. The collection here described, under this and the following heads, represents most of the known forms by very superior examples. The figures at the end indicate, first, the diameter, and second, the thickness in inches and fractions.

390 Discoidal Stone, Tellico Mountain, head waters of the Tellico River, Tenn.; edge rounded, deeply concave on both sides, granular quartzite; very fine and of great size. $5\frac{1}{4}$ x $2\frac{3}{4}$.

391 Discoidal, Franklin Co., Mo.; form like the last quartzite; perfect. $4\frac{1}{4}$ x 2.

392 Discoidal, Franklin Co., Mo.; form much like the last, striped, reddish quartzite. 4 x 2.

393 Discoidal, Gwinnett Co., Ga.; edge beveled, concavities large; of dark, nearly black, material; very fine. $4\frac{1}{8}$ x $1\frac{3}{4}$.

394 Discoidal, Cherokee Co., N. C.: deep concavities, dark granitic rock; fine. $4\frac{1}{2}$ x $1\frac{1}{2}$.

395 Discoidal, Polk Co., Tenn.; broad and thin, with shallow concavities, quartzite, a little chipped but fine. $5\frac{1}{4}$ x $1\frac{1}{2}$.

396 Discoidal, Milton Co., Ga.; edge rounded; very fine. $3\frac{5}{8}$ x $1\frac{1}{2}$.

397 Discoidal, Yancey Co., N. C.; very deep concavities; soapstone, fine. $3\frac{1}{8}$ x $1\frac{3}{4}$.

398 Discoidal, Clay Co., N. C.; of dark, nearly black, stone; perfect. $3\frac{1}{2}$ x $1\frac{1}{4}$.

399 Discoidal, Gwinnett Co., Ga.; edge beveled; very fine. $3\frac{1}{8}$ x $1\frac{3}{4}$.

400 Discoidal, Gwinnett Co., Ga.; edge flat, rounded near the surface, quartzite, slightly chipped; fine. $2\frac{3}{4}$ x $1\frac{1}{4}$.

401 Discoidal, Clay Co., N. C.; edge rounded, concavities shallow, dark stone, with a light vein running through it; perfect. $4\frac{1}{4}$ x $1\frac{1}{8}$.

402 Discoidal, N. C.; quartzite, fine. $3\frac{3}{4}$ x $1\frac{3}{4}$.

403 Discoidal, Lincoln Co., Tenn.; concavities small; fine. $2\frac{1}{8}$ x $1\frac{1}{4}$.

404 Discoidal, Boone Co., Ky.; light granite, perfect. $2\frac{1}{4}$x$1\frac{1}{8}$.

405 Discoidal, Athens Co., O.; thin and small; very good. $2\frac{1}{4}$ x $5\frac{1}{8}$.

406 Discoidal, E. Tenn.: quartzite, defective. $2\frac{1}{4}$ x $1\frac{1}{8}$.

407 Discoidal, Clay Co., N. C.; quartzite, a little damaged, still fine. $3\frac{5}{8}$ x $1\frac{1}{2}$.

408 Discoidal, Clay Co., Tenn.: concavo-convex; perfect, and one of the most unusual forms. $3\frac{1}{4}$ x $1\frac{1}{4}$.

409 Discoidal, Rhea Co., Tenn.; perfect; $2\frac{1}{2}$ x $1\frac{1}{4}$.

410 Discoidal, Clay Co., N. C.; concavities shallow; perfect. $2\frac{1}{2}$ x $\frac{5}{8}$.

411 Discoidal, Tenn.; quartzite, perfect. $1\frac{3}{4}$ x $\frac{3}{4}$.

412 Discoidal, Cherokee Co., N. C.; deep concavities; greenish mottled stone, fine. $2\frac{1}{4}$ x $\frac{7}{8}$.

413 Discoidal, Rhea Co., Tenn.; variegated pinkish quartzite, very fine. $1\frac{1}{2}$ x $\frac{3}{4}$.

414 Discoidal, Lincoln Co., Tenn.; quartzite, perfect. Mr. Spang very properly refers to this as beautiful and rare. 2 x 1.

415 Discoidal, Haywood Co., N. C.; shallow concavities, edge beveled; *rare form*, perfect. $2\frac{7}{8}$ x 1.

416 Discoidal, Macon Co., N. C.; form like the last, but rude perforation extends through the centre; perfect. $3\frac{1}{4}$ x $\frac{7}{8}$.

417 Discoidal, Macon Co., N. C.; small concavities; perfect. $2\frac{1}{4}$ x $1\frac{1}{4}$.

418 Discoidal, Lincoln Co., Tenn,; thick cheese-shape, limestone, a little damaged. $2\frac{1}{8}$ x $1\frac{1}{2}$.

419 Discoidal, Rhea Co., Tenn.; its appearance is evidence of great antiquity; fine. $1\frac{3}{4}$ x $\frac{5}{8}$.

420 Discoidal, Macon Co., N. C.; of toy size, a little gem. $1\frac{1}{4}$ x $\frac{1}{2}$.

421 Discoidal, Rhea Co., Tenn.; good. 2 x $\frac{3}{4}$.

422 Double-concave stone wrought from beautiful white quartz, one side plano-concave, the other convex, with a concavity at the top; *rare form*, perfect. $2\frac{5}{8}$x$1\frac{1}{4}$.

423 Discoidal, Clinton Co., Ill.; of coarse granite, concavities slight; fine. $3\frac{1}{4}$ x $1\frac{1}{2}$.

424 Discoidal, Rhea Co.; Tenn.; plano-concave. $2\frac{1}{4}$ x 1.

425 Discoidal, Mo.; in form approaching oval, has small, deep depressions; very fine. 5 x 2.

DISCS.

Under this head will be found grouped all the varieties of discoidal stones, with the exception of the double concave, so fully represented by the preceding numbers, 390 and following. Many of these discs have the edge oblique to the sides; one face being of considerably larger diameter than the other. For brevity in descriptions this shape is referred to as of bung form.

426 Disc, N. C.; double convex, yellowish quartzite, beautifully wrought, and though slightly blemished on one side, is fine and most desirable. $5\frac{1}{2}$ x 2.

427 Disc, Swaine Co., N. C., bung shape, plano-convex, quartzite; very fine indeed. 4 x $1\frac{1}{2}$.

428 Disc, Western N. C.; bung shape, plano-convex; very fine. $3\frac{3}{4}$ x $1\frac{1}{2}$.

429 Disc, Jackson Co., N. C.: plano-convex, dia. of one face $3\frac{1}{4}$ in., the other 2 in., quartzite, perfect and a remarkable form, thickness 2 in.

430 Disc, N. C.; bung-shape, with plain faces; very fine. $3\frac{1}{8}$ x $1\frac{1}{2}$.

431 Disc, from a mound in E. Tenn.; nearly white quartzite and highly wrought, one face a little blemished, still one of the most desirable objects in the Collection. $3\frac{1}{2}$ x $1\frac{1}{2}$.

432 Disc, N. C.: double-convex, bung shape; very fine. $3\frac{1}{4}$ x $1\frac{1}{2}$.

433 Disc, Swaine Co., N. C.; plano-convex, bung form, quartzite; fine. 3 x $1\frac{3}{8}$.

434 Disc, Macon Co., N. C.; double-convex, bung form, quartzite; perfect. $3\frac{1}{4}$ x $1\frac{3}{4}$.

435 Disc, Swaine Co., N. C.; plano-convex, bung shape, clouded quartzite, a little chipped; very fine. $3\frac{1}{2}$x$1\frac{1}{4}$.

436 Disc, Macon Co., N. C.; double-convex; perfect. $3\frac{1}{4}$x$1\frac{1}{4}$.

437 Disc, Habersham Co., Ga.; double-convex, bluish quartzite, very finely wrought, one face chipped, otherwise extremely fine. $3\frac{1}{2}$ x $1\frac{1}{4}$.

438 Disc, Swaine Co., N. C.; double-convex, reddish quartzite; perfect. $3\frac{3}{4}$ x $1\frac{1}{2}$.

439 Disc, Habersham Co., Ga.; double-convex, smoky quartz or chalcedony; very fine. $4\frac{1}{4}$ x $1\frac{1}{2}$.

440 Disc, Clay Co., N. C.; faces nearly plain, reddish quartzite; very fine. $4\frac{1}{2}$ x $1\frac{3}{8}$.

441 Disc, Clay Co., N. C.; sandstone; very good. 3 x $1\frac{1}{2}$.

442 Disc, N. C.; double-convex, edge rounded, dark stone; fine. $3\frac{7}{8}$ x $1\frac{1}{2}$.

443 Disc, N. C.; double-convex, grayish granite; perfect. $3\frac{1}{2}$ x $1\frac{1}{2}$.

444 Disc, N. C.; double-convex, of black stone; perfect. 3 x $1\frac{3}{4}$.

445 Disc, Clay Co., N. C.; double-convex; very fine. $2\frac{3}{4}$ x $1\frac{1}{4}$.

446 Disc, Macon Co., N. C.; double-convex, with slight depression, granite; very fine. $2\frac{3}{4}$ x $1\frac{3}{8}$.

447 Disc, Macon Co., N. C.; concavo-convex, with depression on the convex face. Mr. Spang classes this as a mortar; white quartz; perfect and *rare*. $3\frac{1}{4}$ x $1\frac{3}{8}$.

448 Disc, Clay Co., N. C.; double-convex, light granite; perfect. $3\frac{1}{2}$ x 1.

449 Disc, Gwinnett Co., Ga.; bi-concave, belongs with the discoidals; quartzite; perfect. $2\frac{1}{2}$ x $1\frac{1}{4}$.

450 Disc, Clay Co., N. C.; double-convex, bung shape, of dark mottled stone, very finely wrought and desirable, though a little piece is chipped from the edge. $2\frac{3}{8}$ x 1.

451 Disc, N. C.; plano-convex, unusual form; fine. 2 x $1\frac{1}{8}$.

452 Disc, Clay Co., N. C.; bung shape, edge chipped. 2x$1\frac{1}{8}$.

453 Disc, Swaine Co., N. C.; bung shape; fine. $2\frac{5}{8}$ x $1\frac{1}{2}$.

454 Disc, N. C.; double-convex; fine. $2\frac{3}{8}$ x 1.

455 Disc, Clay Co., N. C.; double-convex; very fine. $2\frac{3}{8}$x1.

456 Disc, N. C.; double-convex, reddish quartzite. 3 x 1¼.

457 Disc, Macon Co., N. C.; very good. 2¾ x 1¼.

458 Disc, Clay Co., N. C.; double-convex, bung shape, quartzite; fine, though the edge is a little chipped. 3 x 1⅝.

459 Disc, Lincoln Co., Tenn.; double-convex, smoky quartzite; perfect. 2⅞ x 1⅜.

460 Disc, Lincoln Co., Tenn.; sandstone. 2½ x 1½.

461 Disc, Clay Co., N. C.; plano-concave; fine. 5½ x ⅝.

462 Disc, N. C.; double-convex, of dark stone; very fine. 2¾ x ⅞.

463 Disc, Clay Co., N. C.; slight concavity in each side, sandstone; fine. 2½ x 1½.

464 Disc, Tenn.; double-convex; perfect. 1⅝ x ⅜.

465 Disc, Macon Co., N. C.; double-convex; perfect. 1½x¾.

466 Disc, N. C.; perfect. 1⅜ x ⅝.

467 Disc, Clay Co., N. C.; perfect. 1½ x ⅜.

468 Disc, Clay Co., N. C.; double-convex; perfect. 1½ x ⅝.

469 Disc, N. C.; double-convex, fine sandstone; perfect. 1⅜ x ⅜.

470 Disc, Clay Co., N. C.; double-convex; perfect. 1½ x ¾.

471 Disc, Clay Co., N. C.; plano-convex; fine. 1¼ x ½.

472 Disc, Macon Co., N. C.; perfect. 1⅛ x ½.

473 Disc, Clay Co., N. C.; mica slate; perfect. 1¼ x ¼.

474 Disc, Clay Co., N. C.; fine. 1 x ½.

475 Disc, N. C.; fine. 1⅛ x ⅜.

476 Disc, Clay Co., N. C.; double-convex; v. fine. 1⅛ x ⅝.

477 Disc, Clay Co., N. C.; perfect. 1¼ x ⅝.

478 Disc, Clay Co., N. C.; fine. 1⅛ x ¼.

479 Disc, Clay Co., N. C.; bung shape; perfect. 1¼ x ⅝.

480 Disc, N. C.: edge rounded; very fine. 1⅛ x ⅝.

481 Disc, Clay Co., N. C.; reddish quartzite; perfect. 1¼ x ⅝.

482 Disc, Clay Co., N. C.; plano-convex, with depression on each face, perfect; *rare form.* 1⅛ x 1½.

483 Disc, Macon Co., N. C.; plano-convex; perfect. 1¼ x ½.

484 Disc, N. C.; quartzite; a beauty. 1⅜ x ⅝.

485 Disc, Clay Co., N. C.; perfect. 1 x ¼.

GOUGES.

A rare implement outside of New England and the Middle States.

486 Gouge, Mass, ; top slightly broken ; fine. $6\frac{1}{4}$ x $1\frac{3}{4}$.

487 Gouge, near Auburn, N. Y.; good, head chipped. $5\frac{3}{8}$ x $2\frac{1}{8}$.

488 Gouge, Westmoreland Co., Pa. ; a little chipped but very good or fine. $6\frac{1}{2}$ x $2\frac{5}{8}$.

489 Gouge Adze, Madison Co., N. Y. ; ridged back, adapted for prying ; *rare form*. $4\frac{3}{4}$ x $1\frac{5}{8}$.

490 Gouge, Pa. ; one side flat, the other rounded, head pointed, has been newly rubbed over; very fine. $4\frac{1}{2}$ x $1\frac{1}{2}$.

491 Gouge, Jo Daviess Co., Ill ; entire length concave, slightly chipped ; very fine. $6\frac{1}{2}$ x $1\frac{3}{4}$.

492 Gouge, Buncombe Co., N. C. ; head nearly pointed, perfect, *rare*. $5\frac{1}{2}$ x 2.

493 Gouge. O. ; of extra size and very fine ; a remarkable specimen. $9\frac{1}{2}$ x $2\frac{1}{2}$.

494 Gouge, O. ; of mottled stone, a little gem ; one of the smallest and finest implements of the kind I have ever seen. $2\frac{1}{2}$ x $1\frac{1}{8}$.

495 Gouge, Stark Co., O. ; perfect. $3\frac{1}{2}$ x $1\frac{1}{2}$.

496 Gouge, O. ; edge slightly concave, head nearly pointed, polished ; nearly fine. $5\frac{1}{2}$ x $2\frac{3}{8}$.

SPEAR HEADS AND ARROW POINTS.

The note preceding No. 1, in this Catalogue, applies equally to the following lots under this head. The impossibility of giving a separate description to each piece has necessitated the putting of many into lots. These lots are comprised mainly of perfect specimens, each one of which will be found on examination to have some special claim to attention.

497 Arrow and Spear Points, N. Y. ; various forms and sizes ; very fine. 10 pieces.

498 Arrow Points, Pa. ; one of transparent quartz ; very fine. 8 pieces.

499 Arrow Point, Va. ; white quartz, perfect.

500 Spear Head, N. C. ; yellow quartz, perfect. $2\frac{3}{8}$ x $1\frac{3}{4}$.

501 Spear Head, N. C. ; elliptical, serrated ; fine. 5 x $1\frac{1}{2}$.

502 Spear Head, N. C.; barbed and stemmed; fine. 3¼ x 2.

503 Arrow and Spear Heads, N. C.; great variety in size and form, nearly every shape prevailing in the State represented, many of fine quartz. 20 pieces.

504 Spear Head, N. C.; quartz, fine. 3⅞ x 1½.

505 Spear Head, N. C.; flesh-colored stone, perfect. 2⅞ x 1¼.

506 Spear Head, N. C.; triangular, thin base; fine. 3 x 1¼.

507 Fish Spear, N. C.; very fine. 3 x ¾.

508 Spear Head, N. C.; flesh-colored stone, perfect. 2¾ x 1.

509 Arrow and Spear Points, N. C.; select, large and small; all fine. 16 pieces.

510 Arrow and Spear Heads, N. C.; large and small; very fine. 23 pieces.

511 Spear Head, N. C.; one face convex, the other ribbed, remarkable form; fine. 4 x 1½.

512 Spear Head, Ga.; quartz, fine. 3 x 1¾.

513 Arrow and Spear Heads, Ga.; large size; very fine. 5 pieces.

514 Arrow Point, Fla.; triangular. 1½ x 1½.

515 Spear Head, Ark.; sides parallel, ends triangular; *rare form*, fine. 3¾ x 1¼.

516 Arrow Points, Ark.; great variety, large; very fine. 16 pieces.

517 Arrow and Spear Points, Ark.; very fine. 7 pieces.

518 Spear Head, Tenn.; barbed; fine. 3½ x 1½.

519 Spear Head, Tenn.; triangular, stemmed. 4 x 1½.

520 Spear Head, Tenn.; curved, barbed, rotary, serrated; *a rare combination*; fine. 2⅝ x 1⅜.

521 Spear Point, Tenn.; 3¾ x 1½.

522 Spear Point, Tenn.; barbed, elongated point, rounded base; fine. 3 x 1⅛.

523 Spear Points; curved and spiral, a strange form, fine; *very rare*. 3¼ x 1¼.

524 Fish Spear; very fine. 4¼ x 1.

525 Spear Point, Tenn.; barbed, curved and serrated; *rare form*. 2⅛ x 1¼.

526 Arrow and Spear Points, Tenn.; various sizes; extra selected lot. 24 pieces.

527 Arrow and Spear Points, Tenn.; a lot as fine as the last. 24 pieces.

528 Arrow and Spear Points, Tenn.; very choice lot. 16 pieces.

529 Arrow and Spear Points, Tenn.; several serrated and of rare form. 8 pieces.

530 Spear Head, Ky.; barbed, with smooth base; fine. $3\frac{3}{8}$ x $1\frac{1}{4}$.

531 Arrow Points, Ky.; one serrated, one leaf-shape, with hollow base, rare form and perfect. 2 pieces.

532 Spear Head, Ky.; elliptical, fine; *rare form.* 5 x $1\frac{1}{2}$.

533 Arrow and Spear Heads, Ky.; all fine, mostly perfect. 14 pieces.

534 Spear Head, Mo.; pink jasper; fine. $5\frac{1}{2}$ x $1\frac{1}{2}$.

535 Spear Head, Cooper Co., Mo.; broadly expanding between the base and point; fine. $4\frac{1}{2}$ x $1\frac{5}{8}$.

536 Spear Head, Franklin Co., Mo.; broad, square base. $3\frac{1}{4}$ x $1\frac{3}{4}$.

The preceding and most of the following pieces from Missouri, are of beautiful, light, slightly flesh-tinted stone resembling feldspar, a pretty material, admitting of the finest working.

537 Spear Head, Mo.; notched, serrated, with rounded base; perfect. $3\frac{5}{8}$ x $1\frac{3}{8}$.

538 Spear Head, Mo.; with square stem; very fine. $3\frac{3}{4}$x$1\frac{3}{8}$.

539 Spear Head, Mo.; elliptical, notched base; fine. 4 x $1\frac{1}{4}$.

540 Spear Head, Mo.; thin, square base. 4 x 1.

541 Spear Head, Mo.; semi-elliptical, with square stem; very fine. $3\frac{1}{8}$ x $1\frac{1}{2}$.

542 Spear Head, Mo.; square base; fine. $4\frac{1}{2}$ x $1\frac{1}{2}$.

544 Spear Head, Mo.; parallel sides, hollowed base. 4 x $1\frac{1}{8}$.

545 Spear Head, Mo.; barbed and curved; a *very rare form.* $4\frac{1}{2}$ x $1\frac{5}{8}$.

546 Spear Head, Mo.; triangular; very fine. $3\frac{1}{2}$ x 2.

547 Spear Head, Mo.; expanding towards the point, square base; fine. $3\frac{3}{4}$ x $1\frac{1}{4}$.

548 Spear Head, Mo.; expanding towards the base, notched: perfect. 4 x $1\frac{3}{8}$.

549 Spear Head, Mo.; stemmed, handsome variegated stone. $3\frac{1}{4}$ x $1\frac{1}{2}$.

550 Spear Head, Mo.; barbed, with rounded stem, a particle gone from point and one barb. 4 x $1\frac{3}{4}$.

551 Spear Head, Mo.; beveled, rotary, barbed: fine. $3\frac{1}{8}$x$1\frac{1}{2}$.

552 Spear Head, Mo.; triangular, irregular, fine; *rare.* $3\frac{1}{2}$ x $2\frac{1}{8}$.

553 Spear Head, Mo.; curved, stemmed, fine; *rare.* 5 x $1\frac{3}{4}$.

554 Spear Head, Mo.; notched and of irregular form; very fine. 5 x $1\frac{3}{8}$.

555 Spear Head, Mo.; notched, with hollow base, very thick, uncommon form; fine. 3¼ x 1¼.

556 Arrow and Spear Points, Mo.; large and small; an extra fine lot. 18 pieces.

557 Arrow and Spear Points, Mo.; as fine as the last. 20 pieces.

558 Spear Points, Mo.; extra lot; very fine. 10 pieces.

559 Arrow and Spear Points, Mo.; very choice, great variety of form. 27 pieces.

560 Arrow Point, Mo.; serrated, barbed, with hollow base, minute in size; a remarkable specimen. ⅞ x ⅜.

561 Spear Point, Ind.; sides nearly parallel, finely wrought. 4 x 1¼.

562 Spear Point, Ill.; base deeply hollowed; very fine. 4⅛ x 1¼.

563 Spear Point, Ill.; beveled, with hollow base. 3 x 1¼.

564 Arrow and Spear Points, Ill.; all superior. 7 pieces.

565 Arrow Points, Ill.; all very fine, labeled with particular localities. 14 pieces.

566 Arrow Points, Ill.; all labeled, all fine, some of beautiful and *rare form*. 14 pieces.

567 Spear Head, Ill.; shield-shape, barbed; fine. 3⅛ x 1¼.

568 Spear Head, Ill.; curious parti-colored stone. 2¼ x 1¼.

569 Spear Head, Ill.; rounded point, barbed, with square base; *rare form*, fine. 1⅞ x 1½.

570 Spear Point, Ill.; elliptical, with rounded, thin base. 3¾ x 1¼.

571 Spear Heads, Ind.; fine. 3 pieces.

572 Spear Head, O.; notched, with rounded base; fine. 5 x 1⅝.

573 Spear Head, O.; beveled, barbed, smooth, rounded base. 3¼ x 1½.

574 Spear Head, O.; one face flat, the other ridged, fine; a *rare* form. 3½ x 1½.

575 Spear Head, O.; barbed; fine. 3¼ x 1¾.

576 Spear Head, O.; triangular, broad, rounded base. 2½x2.

577 Spear Head, O.; variegated chalcedony; *rare*. 2½ x 1¼.

578 Spear Head, O.; elongated point, barbed and beveled. 2¾ x 1½.

579 Arrow Point, O; elongated triangle, with rounded base, serrated, perfect; *rare*. 1⅞ x ⅝.

580 Spear Head, O.; thick, beveled and curved, *rare* form; fine. 2 x 1¼.

581 Arrow and Spear Heads, O.; large and small, some rare forms; fine. 17 pieces.

582 Arrow Heads, Mich.; medium size; all fine. 12 pieces.

583 Arrow Heads, Mich.; fine. 12 pieces.

584 Arrow and Spear Heads, Mich.; different sizes; fine lot. 12 pieces.

585 Arrow Points, Ill.; five small, one of remarkable form. 6 pieces.

586 War Points, Wis.; chalcedony; very fine. 3 pieces.

587 Spear Head, Wis.; elliptical, chalcedony, perfect, and an unusual specimen both for size and material. 6x2⅛.

588 Spear Head, locality unknown; of yellowish quartzite, clouded with cinnamon color, notched, with square base; perfect, one of the handsomest and most desirable objects in the sale. 6⅛ x 1⅞.

589 Spear Head, Blount Co., Ala.; of reddish jasper, notched, with square base, a little curved; in size and workmanship even superior to the last. 6½ x 1¾.

590 Spear Head, N. C.; rotary; very fine. 5¼ x 1¾.

591 Spear Head, Mo.; curved, thick; fine. 5½ x 2¾.

592 Spear Head, Chester Co., Pa.; jasper. 6¼ x 2⅛.

593 Knife or Spear Head, Chester Co., Pa.; jasper, twisted: very fine. 5 x 2½.

594 Spear Head, O.; elliptical, with rounded base; fine. 4½ x 1⅞.

595 Spear Head; cinnamon-colored jasper, barbed, with rounded base; beautifully wrought. 4⅜ x 1⅜.

596 Spear Head, O.; triangular, barbed, with rounded base: very fine. 3 x 1⅞.

597 Spear Head, O.; black flint, resembles obsidian, serrated; fine. 2¾ x 1¼.

598 Spear Head or knife, Ill.: elliptical, a little gone from one end; fine. 7 x 2⅛.

599 Spade-shaped implement, Ill.; quartzite, beautifully wrought. 4½ x 1⅞.

600 Spear Head, Mich.; elliptical, with square, thin base; very fine. 5⅞ x 2.

601 Dagger, washed from a mound on the banks of the Tennessee River in the freshet of 1865, finely chipped and of large size and most uncommon form. 8 x 1¼.

602 Spear Head, Blount Co., Tenn.; base broken, very fine and large. 7¼ x 1½.

603 Spear Head, Ky.; semi-elliptical, square, thin base. 4¼ x 2⅛.

604 Spear Head, Tenn.; rotary, barbed, with rounded base, point broken; very fine. $5\frac{1}{2}$ x $1\frac{5}{8}$.

605 Spear Head, Tenn.; barbed. $5\frac{5}{8}$ x 2.

606 Spear Head, Tenn.; thick and narrow; fine. $5\frac{1}{4}$ x $1\frac{3}{8}$.

607 Spear Head, Tenn.; serrated and barbed, fine; *rare*. $4\frac{3}{4}$ x $1\frac{5}{8}$.

608 Spear Head, Tenn.; transparent quartz; fine. $3\frac{7}{8}$ x $1\frac{1}{4}$.

609 Spear Head, Tampa Bay, Fla.; of red stone; fine. $2\frac{1}{2}$ x $1\frac{3}{4}$.

610 Spear Head, Charlotte Harbor, W. Fla.: handsome colored stone; fine. $2\frac{1}{2}$ x $1\frac{1}{8}$.

611 Spear Head, W. Fla.; chalcedony; fine. 2 x $1\frac{1}{4}$.

612 Spear Head, W. Fla.; of transparent flesh-colored stone; very fine. 2 x $1\frac{1}{4}$.

613 Spear Head, Mo.; doubly-curved, with barbs extending nearly the length of the stem, one barb broken; a *rare form* and fine. $4\frac{1}{2}$ x 2.

614 Spear Head, Mo.; of striped jasper, beautiful and fine. $2\frac{1}{4}$ x $1\frac{1}{8}$.

615 Spear Head, Mo.; fine. $4\frac{3}{8}$ x $1\frac{1}{2}$.

616 Spear Head or knife, Guatemala; obsidian, broad, elliptical; very fine and *rare*. 2 x $1\frac{1}{8}$.

ARROW POINTS, ETC., PACIFIC COAST.

This collection of Arrow Points from the Northwest coast is in quality much superior to any that I have heretofore offered for sale. All are selected, and a large proportion are of that class usually called Jewelry Points.

617 Jewelry Points; jasper, chalcedony, obsidian, &c., serrated, barbed and notched, of large size, some exceeding $1\frac{1}{2}$ in. in length, which is very unusual; perfect. 12 pieces.

618 Jewelry Points, of smaller size, similar materials, as fine as the last. 20 pieces.

619 Jewelry Points; barbed, jasper, &c.; very fine. 12 pcs.

620 Jewelry Points; greater variety in form and material; perfect. 24 pieces.

621 Jewelry Points; chalcedony, jasper, &c., mostly barbed; very fine. 24 pieces.

622 Jewelry Points; medium size, an extra selection. 20 pieces.

623 Jewelry Points; extra material, some transparent, some bright colors; perfect. 25 pieces.

624 Jewelry Points, of darker material, medium size. 24 pcs.

625 Jewelry Points; minute, some of the smallest size; very fine. 20 pieces.

626 Jewelry Points; many of chalcedony; one of the finest lots in the sale. 25 pieces.

627 Jewelry Points; jasper, small size; very fine. 23 pcs.

628 Arrow Points, of light opaque material, as fine in form and workmanship as any of the preceding. 25 pcs.

629 Arrow Points; dark opaque; very fine. 20 pieces.

630 Arrow Points; obsidian, serrated, barbed, triangular, &c.; perfect. 30 pieces.

631 Arrow Points; variety in form, some serrated, mostly of dark opaque material; very fine. 36 pieces.

632 Arrow Points; mostly small, many uncommon forms; very fine. 24 pieces.

633 Arrow Points; obsidian, jasper, &c., all of the form known as war points; very fine. 12 pieces.

634 Arrow Points; jasper, &c., some serrated, mostly barbed; very fine. 25 pieces.

635 Arrow Points; illustrates nearly every form and material, of small to medium size. 47 pieces.

636 Arrow Points; obsidian and other dark material; very fine. 40 pieces.

637 Scrapers; jasper, chalcedony, obsidian, &c., found with the arrow points at the Northwest, the same material and workmanship and much rarer. 10 pieces.

638 Arrow Points; various forms, superior lot. 25 pcs.

639 Arrow Points; large size, average above an inch in length; very fine. 24 pieces.

640 Arrow Points; selected for rarity of form; one very large; all fine. 8 pieces.

641 Arrow Points; large, entremely fine. 3 pieces.

642 Spear Points; fine and *very rare*; a point from the Northwest coast exceeding 1¼ in. in length is very seldom met with; one of this lot is 2½ in. long, and they will average fully 2 in. 7 pieces.

643 Scrapers; obsidian, very fine, much rarer than the points. 4 pieces.

644 Scrapers: chalcedony; fine. 3 pieces.

645 Scrapers; chalcedony, agate, etc.; very fine. 11 pieces.

645*a* Arrow Points, Cal.; obsidian, rounded base and doubly barbed on each side, fine and *rare;* length 1¼ inches.

645*b* Arrow Point, Cal.; size, form and material like the last.

645*c* Arrow Point, Cal.; triangular, with hollowed base, obsidian; perfect.

645*d* Arrow Point, Cal.; obsidian, barbed, fine; *rare.*

MINUTE CELTS, ETC.

The following objects are all of very superior workmanship and so small in size that they could scarcely have been of service as implements. Is it not probable that some of the smallest and finest were made for ornaments or toys?

646 Celt, Oneida Co., N. Y.; bevel mostly on one side; perfect. $2\frac{7}{8} \times 1\frac{5}{8}$.

647 Celt, Berks Co., Pa.; head shows marks of use; perfect. $2\frac{1}{2} \times 1\frac{1}{2}$.

648 Celt, W. Va.; polished; perfect. $1\frac{1}{4} \times 1\frac{1}{8}$.

649 Celt, W. Va.; top nearly pointed; perfect. $1\frac{3}{4} \times \frac{7}{8}$.

650 Celt, W. Va.; top broader; perfect. $1\frac{7}{8} \times \frac{7}{8}$.

651 Celt, O.; flats polished, edges chipped; fine. $1\frac{1}{2} \times 1\frac{1}{8}$.

652 Celt, O.; perfect. $1\frac{5}{8} \times 1\frac{1}{8}$.

653 Celt, O.; triangular, top nearly pointed; perfect. $1\frac{7}{8} \times 1\frac{5}{8}$.

654 Celt, O.; form like the last; perfect. $1\frac{5}{8} \times 1\frac{1}{4}$.

655 Celt, O.; dark mottled stone; perfect. $2\frac{1}{4} \times 1\frac{1}{2}$.

656 Celt, Ironton, O.; edge oblique to the sides, labeled hematite, but I think it is not; fine. $2\frac{7}{8} \times 1$.

657 Celt, O.; fine. $2\frac{1}{2} \times 1\frac{7}{8}$.

658 Celt, O.; perfect. $2\frac{3}{8} \times \frac{3}{4}$.

659 Celt, N. C.; perfect. $2\frac{7}{8} \times 1\frac{1}{2}$.

660 Celt, N. C.; sides square; perfect. $3 \times 1\frac{1}{4}$.

661 Celt, Macon Co., N. C.; curved, the top with edge at a right angle to the opposite edge, grooved in the manner of an axe, unique form; perfect. $2\frac{3}{4} \times 1\frac{1}{8}$.

662 Celt, Martin Co., Ky.; granite, nearly square; perfect. $1\frac{1}{2} \times 1\frac{3}{8}$.

663 Celt, Tenn.; diorite, broad and thin, with a small perforation close to the head extending nearly through; very fine and a *rare piece.* $2\frac{3}{4} \times 1\frac{1}{2}$.

664 Celt, Rhea Co., Tenn.: of ribbon slate, polished; perfect. $2\frac{7}{8}$ x $1\frac{7}{8}$.

665 Chisel, Tenn.; nearly round, sides nearly parallel; perfect. $4\frac{1}{2}$ x $\frac{7}{8}$.

666 Gouge, Tenn.: perfect and *extremely rare*. $2\frac{1}{4}$ x $1\frac{1}{4}$.

667 Celt, Tenn.; fine. $3\frac{1}{4}$ x $1\frac{3}{8}$.

668 Celt, Tenn.; very fine. $3\frac{1}{2}$ x $1\frac{3}{8}$.

669 Celt, Mich.; jasper, rounded top; perfect. $2\frac{1}{8}$ x $1\frac{5}{8}$.

670 Celt, Mich.; fine but top broken. $2\frac{1}{4}$ x $1\frac{1}{2}$.

671 Celt, Mich.; fine. $2\frac{1}{4}$ x $1\frac{1}{2}$.

672 Celt, Mich.; good. 2 x $1\frac{3}{8}$.

The location of the four following unknown, but they are believed to be from the West Indies.

673 Celt, of reddish mottled stone, polished and of the finest workmanship; a beautiful implement. $2\frac{7}{8}$ x $1\frac{5}{8}$.

674 Celt, of reddish yellow flint, polished; perfect. $2\frac{1}{2}$ x 1.

675 Celt; material like the last. The great antiquity of this piece is shown by the change that has taken place on its surface, the red centre is apparently encased by a shell of lighter color, polished, perfect and most desirable. $2\frac{1}{4}$ x 1.

676 Celt; yellow flint or jasper, polished; very fine. $2\frac{3}{4}$ x $1\frac{7}{8}$.

677 Celt; locality unknown, of singular form; fine. $2\frac{5}{8}$x$1\frac{3}{8}$.

678 Celt, Guatemala: of beautiful stone resembling hematite, polished and perfect. $1\frac{1}{2}$ x $1\frac{1}{8}$.

679 Celt, Guatemala; same material, triangular, with head squared, polished; perfect. $1\frac{5}{8}$ x $1\frac{1}{8}$.

680 Ornament, of white quartz, broad, leaf-shape, with stem, perfect, and the only piece of the kind I have seen. $1\frac{5}{8}$ x 1.

SPADES, HOES, ETC.

681 Spade, Ill.; quartzite, symmetrical and finely wrought, point polished, unusual size. $14\frac{1}{4}$ x 5.

682 Spade, Union Co., Ill.; a finer specimen than the last. $25 was paid for this piece. $13\frac{1}{2}$ x $5\frac{5}{8}$.

683 Implement, Mo.; a duplicate in miniature of No. 682; perfect. $3\frac{3}{4}$ x $1\frac{5}{8}$.

684 Implement, Ill.; same form as preceding; perfect. $2\frac{3}{8}$ x $1\frac{1}{2}$.

685 Spade, Jersey Co., Ill.; top less pointed, edge broader and more rounded than the usual form, edge highly polished, slightly curved, fine example and a rare form. $8\frac{3}{4}$ x $4\frac{3}{8}$.

686 Spade or hoe, Ill.; form resembles the last; fine. $7\frac{1}{8}$x4.

687 Spade-shape implement, N. C.; grayish quartz, nearly elliptical, with one end square. $7\frac{1}{2}$ x $3\frac{1}{4}$.

688 The same, Swaine Co., N. C.; very fine. $6\frac{3}{8}$ x $2\frac{7}{8}$.

689 Knife or spade, Tenn.; jasper, twisted and curved; very fine. 7 x $2\frac{3}{8}$.

690 Knife or spade, Oneida Co., N. Y.; jasper, broken and cemented; very fine. $5\frac{1}{2}$ x $2\frac{1}{4}$.

691 Similar object, Chester Co., Pa.; jasper; very fine. $5\frac{1}{2}$ x $2\frac{1}{8}$.

692 Spade-shape implement, of small size, Va.; perfect. $4\frac{1}{2}$ x 2.

693 Another, Mo.; very fine. $4\frac{3}{4}$ x $2\frac{1}{8}$.

694 Another, locality unknown, of beautiful red jasper; fine. $3\frac{1}{4}$ x $1\frac{3}{4}$.

695 Another, Mo.; perfect. $4\frac{1}{2}$ x $1\frac{3}{4}$.

696 Spade, Cooper Co., Mo.; fine. 6 x $2\frac{1}{2}$.

697 Spade, near Oxford, Pa.; slate, perfect; a very rare implement in the Eastern States. $5\frac{3}{8}$ x $3\frac{1}{4}$.

698 Spade, O.; of light porous stone. $5\frac{1}{4}$ x $2\frac{1}{2}$.

699 Spade or knife, Oneida Co., N. Y.; dark jasper, edges deeply notched. $7\frac{1}{4}$ x $1\frac{3}{4}$.

700 Discus, from a cache, Schuyler Co., Ill.; nearly circular, finely chipped, one side convex, the other more nearly flat; perfect and *rare;* dia. $6\frac{1}{2}$ in.

701 Discus, Ill.; from the same cache; material a nearly black flint-like stone, perfect; dia. $6\frac{3}{8}$ in.

702 Discus, from the same cache; similar material, ovate. $6\frac{1}{2}$ x $4\frac{5}{8}$.

703 Discus, O.; in form like the last; perfect. $5\frac{1}{2}$ x 4.

BEADS.

Amongst the most elaborately wrought and beautiful pre-historic objects in stone, must be reckoned beads, and the following list contains probably one of the finest assortments known, exhibiting as it does numerous varieties in form and material.

704 Bead, Clay Co., N. C.; reddish sandstone, perfect, circular flat. 1 x $\frac{1}{2}$.

705 Bead, Clay Co., N. C.; soapstone, flat circular, hole oblique to the surface; perfect. $\frac{7}{8}$ x $\frac{1}{4}$.

706 Bead, Clay Co., N. C.; of hard stone, perforation from opposite sides and smallest in the middle; perfect. $\frac{7}{8}$ x $\frac{3}{8}$.

707 Bead, N. C.; globular, slightly flattened, mottled stone, perfect; dia. $\frac{3}{4}$ in.

708 Bead, from a mound, Little Pigeon River, Tenn.; sandstone or pottery, perfect; length $1\frac{7}{8}$, dia. $\frac{7}{8}$.

709 Bead, Tenn.; material like the last, perforation lengthwise, is met by one from the side; the form is such that it may have been used as a pipe, for which it is quite well adapted; cylindrical; very fine. $1\frac{3}{4}$ x $\frac{3}{4}$.

710 Bead, N. C.; disc-shape, perforation a little to one side of the centre; fine. $1\frac{5}{8}$ x $\frac{1}{2}$.

711 Bead, N. C.; light ferruginous stone, nearly square, large perforation; perfect. $1\frac{3}{4}$ x $1\frac{5}{8}$.

712 Bead, N. C.; dark stone, edge and perforation oblique to the side; perfect, a *rare form*. 1 x $\frac{3}{8}$.

713 Bead, W. N. C.; octahedral in form; white quartz, nearly perfect; dia. $\frac{7}{8}$.

714 Bead, N. C.; stone, cylindrical, one end enlarged, the other seems to have been broken and afterwards repaired. $1\frac{1}{4}$ x $\frac{5}{8}$.

715 Bead, N. C.; steatite, cylindrical; very fine. $1\frac{7}{8}$ x $\frac{3}{8}$.

716 Bead or small Banner Stone, O.; striped slate; slightly imperfect. $1\frac{1}{4}$ x $1\frac{1}{4}$.

717 Bead or Pendant, N. C.; lapis lazuli, (?) cylindrical, wedge shape at one end; highly polished. $1\frac{3}{8}$ x $\frac{1}{4}$.

718 Bead, Oneida Co., N. Y.; flattened, broader at one end, catlinite; perfect, *very rare*. 1 x $\frac{3}{4}$.

719 Bead Oneida Co., N. Y.; catlinite, form like the last, but with rounded sides and much larger; perfect, *rare*. $1\frac{7}{8}$ x $\frac{5}{8}$.

The eleven lots following were supposed by the former owner to be of stone, and were purchased by me as such; a more careful examination leads to the belief that they are of glass. They are all from Indian graves, many from mounds, of course from interments within the historic period; many of the beads are probably Venetian, though the finest are of a most unusual color and appearance, closely resembling in color and in the play of colors opal or opalized quartz. They are very ancient, the enamel much affected by age, and were doubtless brought here by very early visitors to this continent.

720 Bead, N. C.; globular, of beautiful opalescent material, in color approaching very light robin's egg blue, the surface covered with ornamentation, in minute letter-like characters, in which the crescent is the prevailing form; perfect; dia. $\frac{3}{4}$ in.

721 Bead, N. C.; almost a duplicate of the last, equally fine; dia. $\frac{7}{8}$.

722 Bead, N. C.; same material and ornamentation, but lacks the opalescent appearance; perfect; dia. 1 in.

723 Bead, N. C.; same material as No. 720, form a pentagon, the ornamentation in wavy lines, pale blue, opalescent; perfect. 1 x $\frac{5}{8}$.

724 Bead, N. C.; same material as the last, with ornamentation like 720, barrel shape; perfect. $1\frac{1}{8}$ x $\frac{3}{4}$.

725 Bead, N. C.; duplicates the last in form, but ornaments a combination of the crescent and wave lines, opalescent. $1\frac{1}{8}$ x $\frac{3}{4}$.

726 Bead, N. C.; barrel-shape, same material; very fine. $\frac{7}{8}$ x $\frac{3}{4}$.

727 Bead, Clay Co., N. C. This bead is globular in form, of the same material as the preceding and is evidently made by winding the glass upon itself around a rod, the withdrawal of which left a hole through the centre; perfect and very curious; dia. $\frac{3}{4}$ in.

728 Beads, N. C.; same material, but two are of smaller size; they show the color and opalescence in great perfection; very fine; dia. $\frac{1}{2}$ to $\frac{3}{4}$ in. 3 pieces.

729 Beads, ovoid, N. C.; same material, opalescent; perfect. 2 pieces.

730 Bead, N. C.; spherical, elongated, blue; fine. $\frac{7}{8}$ x $\frac{3}{4}$.

731 Beads, E. Tenn.; from a small mound near Little Pigeon River; shell, cylindrical, expanding in the centre; perfect; average length $\frac{3}{4}$ in. 6 pieces.

732 Beads, Tenn.; duplicates of the last lot in form and equally perfect. 5 pieces.

733 Beads, E. Tenn.; globular, with the ends flattened, shell perfect. 10 pieces.

734 Beads, Tenn.; duplicate of the last lot, equally fine; average dia. $\frac{1}{2}$ in. 10 pieces.

735 Beads, Tenn.; form like the preceding shell, but some are smaller; perfect. 17 pieces.

736 Beads, Tenn.; shell of large size and various forms; perfect. 5 pieces.

737 Beads; shell large, differing from the last; perfect. 6 pieces.

738 Beads, Tenn.; shell, a representative lot, selected for variety in size and form, a very desirable assortment; perfect. 20 pieces.

739 Another assortment, equally fine. 15 pieces.

All of the preceding shell beads are evidently made from the columellae of large shells (Bysicon, Strombus, etc.); in the following of great size, the shape is made to conform somewhat to the natural figure of the centre of the shell, and the spiral groove in many cases shows very plainly.

740 Bead, Sterritt Mound, Blount Co., Tenn.; from a shell of immense size; perfeet. $1\frac{3}{8}$ x $1\frac{1}{4}$.

741 Bead, Tenn., same locality; shell; perfect. $1\frac{5}{8}$ x $1\frac{1}{4}$.

742 Bead, Tenn.; shell; perfect. $1\frac{1}{2}$ x $1\frac{1}{4}$.

743 Bead, Tenn,; shell, long, shows the spiral depression referred to; perfect; 2 x 1.

744 Bead, Tenn.; shell; fine. $1\frac{3}{4}$ x 1.

745 Bead, Tenn.; Sterritt's Mound; shell, perfect, a large part of the surface covered with a cinnamon-colored coating eansed by the action of the earth and atmosphere; this coating readily pecls off, leaving the surface below of a chalky whiteness; perfect. $1\frac{3}{8}$ x $\frac{1}{4}$.

746 A string of beads, E. Tenn.; from a mound at the mouth of Lick Creek, Green Co.; some of these beads are flat and resemble the wampum in use by the Indians a hundred years ago or more, but they are evidently wrought from the columns of univalve shells; most of them are elongated, some round, some angular; *rare* and desirable. 169 pieees.

747 String of Beads, E. Tenn.; all perfeet and running in size from $\frac{3}{8}$ to $\frac{7}{8}$ in. in dia., shell, all perfect; very desirable as a collection. 75 pieces.

748 Beads, Tenn.; dise form, shell, perfeet; *rare*. 3 pcs.

749 Beads, Tenn.: like the last; perfect. 3 pieces.

750 Beads, Tenn.: shell, like the last, some apparently in process of manufacture, some coneavo-convex: a *rare lot*. 9 pieces.

The three lots following, unlike the foregoing, are entire shells perforated for use as beads.

751 String of Beads, from a mound in E. Tenn.: the material a small conical shell, with perforation through the side. 196 pieces.

752 Beads, E. Tenn.; perforated shells like last: in perfect condition. 52 pieces.

753 Beads, E. Tenn.; from a mound, the olivia shell, perforated at the base; a fine lot; average length 1½ in. 50 pieces.

754 Beads, Ill.; three are small flattened discs, and one is exactly egg-shape; length ⅞ in.: very fine. 4 pcs.

755 Bead, O.; ivory or bone; form, a long cylinder, cigar-shape, length 5 in., dia. in the middle ⅜ in., at the ends less than ¼ in., perforation, dia. less than ⅛ in.; one of a number found together, and the only find of this description that has ever come to my knowledge; a beautiful object and *extremely rare.*

756 Beads, N. C.; from a grave in Clay Co.; glass; a great variety in form and size, globular, cylindrical, disc-shape, etc., size varying from very small to more than an inch in length; ancient, all fine. 40 pieces.

757 Beads, N. C.; appear to be stone, but are probably glass or porcelain; ancient, perfect. 4 pieces.

758 Beads, N. C.; glass; one an octahedron, with truncated points, bears a perfect resemblance to agate; perfect. 17 pieces.

759 Beads, N. Y.; from an ancient Indian grave in Oneida Co.; glass, perfect. 2 pieces.

760 Beads, N. C.; from an ancient burial mound in Macon Co.; glass; perfect. 3 pieces.

761 Beads, N. C., from a burial mound; glass, small size; perfect. 12 pieces.

762 Beads, N. C.; some of glass, some of doubtful material; ancient and perfect. 6 pieces.

763 Beads, N. C.; same material as No. 720; of large size, perfect. 3 pieces.

764 String of Beads, N. C.; from an ancient grave, disc shape and globular, but mostly cylindrical; one 1¾ in. in length; glass, fine. 23 pieces.

765 String of beads from an Indian grave representing nearly all forms and colors; globular, large and small, some more than 2 inches in length; glass. 233 pieces.

766 String of beads, Pa., similar to the last; glass. 137 pcs.

767 String of beads like the preceding, from an Indian grave in Pennsylvania, of smaller size; all fine. 125 pieces.

768 Bead, Tenn.; from a mound in Green Co.: this bead is a beautiful perforated pearl, more than ¼ inch in dia.; *extremely rare.*

769 Bead, E. Tenn.; duplicate of the preceding; a pearl.

770 Bead, E. Tenn.; like the last two, but the pearl is of larger size; perfect and *extremely rare.*

771 Bead or ring, Mo.; mound builders' pottery; dia. $1\frac{5}{8}$.

772 Bead, Ga.; jasper, somewhat irregular, oblong form. $1\frac{1}{4}$ x $1\frac{3}{8}$.

SHELL AND BONE OBJECTS.

773 Shell Gorget, E. Tenn., from a mound in Sevier Co. This gorget has two perforations, and the inner surface is elaborately decorated with a carving, thought to represent a coiled rattle-snake, this device being the favorite one for objects of this sort. See Jones' Work, plate 30, figure 3, and Rau's United States National Museum, figure 272; perfect, perhaps the finest object of this description known, nearly round, deeply concave. $6\frac{3}{8}$ x $5\frac{1}{4}$.

774 Shell Gorget, Tenn.; triangular, one corner truncated; perfect. $5\frac{1}{2}$ x 4.

775 Shell Gorget, Tenn.; triangular, corners rounded, ornamented on the convex side. $2\frac{5}{8}$ x $1\frac{7}{8}$.

776 Shell Hair Pin, E. Tenn.; from a mound 18 miles above Knoxville; length $5\frac{3}{4}$ in., dia. of head $\frac{7}{8}$ in., of the pin $\frac{3}{8}$.

These pins are made from the central column of several varieties of large shells: some of them show the spiral groove naturally existing in the shell; in all cases this groove is visible in the head of the pin. Supposed to have been used as ornaments for the hair. They are but seldom met with.

777 Shell Hair Pin, E. Tenn.; perfect like the last, but of smaller size; length 6 in.

778 Shell Hair Pin, E. Tenn.; shows the spiral groove refered to; as fine as possible and of the largest size; length $6\frac{7}{8}$ in.

779 Shell Hair Pin, E. Tenn.; covered with a coating like that on No. 745, perfect; length $6\frac{1}{2}$ in.

780 Shell Hair Pins or Pegs, E. Tenn.; like the four preceding, but smaller, perfect; length $1\frac{3}{4}$ and $1\frac{3}{8}$ in. 2 pieces.

781 Shell Pin or Ornament; head flat, irregular form approaching circular, pin flat and at right angles with the surface of the head; mound relic, perfect, and so far as I am aware undescribed; dia. of head $2\frac{1}{8}$ in., length of pin $2\frac{3}{4}$ in.

782 Shell needle, curved; elliptical, with perforation at the end; length, 3 x ½.

783 Bone needle or awl, E. Tenn.; mound relic; length 4¼.

784 Bone awl, E. Tenn.; perfect. 4⅞.

785 Bone awl, E. Tenn.; mound relic; fine. 5¼.

786 Bone needle, Tenn.; fine. 6½.

787 Bone needle or awl, E. Tenn.; perfect. 4½.

788 Bear's Tooth, E. Tenn.; mound relic.

COPPER AND IRON OBJECTS.

789 Copper disc, W. Tenn.; from a mound in Green Co.; circular, slightly concave; dia. 5½ in., perforation in the centre 2⅛ in. in dia.; *exceedingly rare.*

790 Copper object of unknown use, W. Tenn.; from the same mound as the preceding, in form a flat bar ⅛ in thickness, 10 long, 1⅜ wide at one end and ⅞ wide at the other.

The following are all, of course, within the historic period, and probably are mostly of European workmanship.

791 Spear or Lance Head, of iron, dug up in Madison Co., N. Y.; long, narrow-pointed blade, with socket; perfect. 9⅝ x 1⅜.

792 Iron Axe or Tomahawk, Jackson Co., N. C.; doubtless cotemporary with the earliest white settlers; shows marks of great age; fine. 5½ x 3⅜.

793 Iron Tomahawk, N. C.; taken from the bottom of an old mining shaft, perfect and of very pretty form, top perforated for a pipe. 5½ x 2⅜.

794 Iron Tomahawk, Habersham Co., Ga.; like the former, long and narrow, with perforation at the top; very fine. 4⅞ x 1⅝.

795 Iron Axe, with broad blade and hammer-head, E. Tenn.; fine and a rare form. 2¾ x 2½.

796 Iron Tomahawk, locality unknown; square head, broad expanding blade or bit, a most unusual form; fine. 4⅛ x 3¼.

797 Iron Tomahawk, Mitchell Co., N. C.; found at the bottom of an ancient shaft, square head, with triangular eye, 3 in. in length, blade narrow; fine. 5¾ x 2⅝.

798 Iron Tomahawk of toy size; very fine. 3¼ x 1¾.

799 Iron Tomahawk, top pointed, a socket instead of an eye for insertion of the handle, a pointed projection at right angle with the blade; unique form, perfect, $4\frac{1}{2}$x3.

800 A curious implement of iron supposed to have been used at an early period for marking cattle; *very rare.* $3\frac{3}{4}$ x $2\frac{1}{4}$.

801 Iron arrow point. $2\frac{1}{2}$.

PESTLES.

802 Pestle, N. J.; cylindrical, slightly curved, tapering toward the ends; very fine. 12 x $2\frac{1}{2}$.

803 Pestle, N. C.; cylindrical, a little flattened and tapering; perfect. $12\frac{1}{8}$ x $2\frac{5}{8}$.

804 Pestle, Madison Co., N. Y.; irregular in form, one end nearly pointed. $11\frac{3}{4}$ x $1\frac{5}{8}$.

805 Pestle: long square pestle, Oneida Co., N. Y; *rare form.* $12\frac{1}{4}$ x 2.

806 Pestle, O.; long cylindrical, one side flattened, tapers toward the ends; fine. $9\frac{1}{2}$ x $2\frac{3}{4}$.

807 Pestle, N. C.; flattened, cylindrical, tapers towards the top. $11\frac{3}{4}$ x $2\frac{1}{8}$.

808 Pestle, Monroe Co., Pa.; irregular in form, plainly shows pecking over much of its surface, but a portion is natural, slightly curved. $11\frac{1}{4}$ x $2\frac{1}{2}$.

809 Pestle, Swaine Co., N. C.; cylindrical, towards one end triangular, both ends square; a *rare form.* 10 x $2\frac{3}{8}$.

810 Pestle, E. Tenn.; cylindrical, one edge contracting to a wedge form. The long pestle is not uncommon in the Eastern States, but is a rare object at the West. $13\frac{1}{4}$ x $2\frac{1}{4}$.

811 Long Pestle, Madison Co., N. Y.; one end enlarged and curving; near the opposite end on all parts is cut a series of deep grooves, oblique to the length and varying in length from $\frac{3}{4}$ of an inch to $2\frac{1}{2}$. The grooves are evidently cotemporary with the implement, which shows marks of great age; a *most rare form.* $12\frac{3}{4}$ x $2\frac{1}{4}$.

812 Long Pestle, N. C.; square, with corners rounded, expanding towards one end; *rare* both for form and location, very fine. 15 x $2\frac{1}{4}$.

813 Pestle, N. C.; square, expanding towards one end, perhaps the *rarest form;* perfect and of great size. $21\frac{1}{4}$ x $2\frac{5}{8}$.

814 Long Pestle, Conn.; form, a flattened cylinder; very fine. $12\frac{3}{4}$ x $2\frac{3}{8}$.

815 Long Pestle, Mass.; cylindrical; perfect. 13 x 2.

816 Long Pestle, N. J.; cylindrical; perfect. 19 x $2\frac{1}{2}$.

817 Flat-head Pestle, O.; worn, still fine. $5\frac{1}{2}$ x $3\frac{1}{4}$.

818 Conical Pestle, Mo.; head pointed; fine, and a very uncommon form. 5 x 3.

819 Mushroom-shape Pestle, O.; of dark granite, unusually perfect, and *rare in such condition*. $6\frac{1}{4}$ x $3\frac{1}{2}$.

820 Flat-head Pestle, O.; fine. $4\frac{3}{4}$ x $3\frac{1}{4}$.

821 Conical Pestle, O.; fine, but shows marks of use and great age. $5\frac{1}{4}$ x $3\frac{1}{2}$.

822 Pestle, O.; conical, with broad, flat base; fine. 5 x $3\frac{1}{2}$.

823 Pestle, O.; face oblique to the handle, shows the central depression, much worn though originally very fine. 6 x $3\frac{3}{4}$.

MISCELLANEOUS.

Mr. Spang had in his collection a large number of objects, which he designated simply as undescribed; many of these will be found in the following list.

823*a* Mortar, O.; hemispherical in form, deeply concave, the concavity polished by much use, of very hard bluish stone, perfect and *rare*, dia. $4\frac{1}{2}$, height 3.

823*b* Mortar, Swaine Co., N. C.; form resembling the last, but somewhat oval, of reddish granite finely wrought and perfect. $4\frac{1}{2}$ x $1\frac{3}{4}$.

824 Double Mortar, Lincoln Co., Tenn.; nearly circular with concavity at top and bottom, very fine. $7\frac{1}{4}$ x $2\frac{1}{8}$.

825 Double Mortar, N. C.; nearly circular, one concavity much deeper than the other, very fine. $6\frac{3}{4}$ x $2\frac{1}{2}$.

826 Double Mortar, S. Ill.; irregular in form, deep depression on one side and a shallow one on the other, and in the centre of the last a small, deep depression; fine. $7\frac{1}{2}$ x 2.

827 Sinker, N. C.; soapstone, oval, with perforation $\frac{1}{2}$ in. in dia. $4\frac{1}{2}$ x $3\frac{3}{4}$.

828 Sinker, Macon Co., N. C.; soapstone, perforation like the last. $4\frac{1}{4}$ x 5.

829 Sinker, N. C.; soapstone, broken.

830 A curious petrifaction with a round depression on one side, Ky. 4 x $3\frac{1}{4}$.

831 Anvil, Tenn.; doubly concave; sandstone. 6 x 4.

832 Hammer Stone, Ark.; oval; fine. 4½ x 3¼.

833 Hammer Stone, Tenn.; oval. 2½ x 2¾.

834 Thick Disc or Hammer Stone, N. C. dia. 2½ in.

835 Hammer Stone, N. C.; nearly circular; perfect. dia. 2½.

836 Flaking Hammer, Allegheny Co., Pa. dia. 1⅞.

837 Cheese-form Disc, Tenn.; depression at top and bottom; very fine, a scarce form. 2⅛ x 1½.

838 Oval Hammer Stone, N. C.; fine. 3 in.

839 Hammer or Rubbing Stone, N. C.; circular, flattened; fine. 2⅛ x 1¼.

840 Target Stone, Swaine Co., N. C.; globular, slightly flattened at one point in the surface so as to retain its place on a smooth surface, but may be overturned with the slightest touch, supposed to have been used for practice with arrows or spears, perfect and *so rare as to be found in very few collections*, dia. 1¾.

841 Stone Ball, Mitchell, Co., N. C.; very fine, dia. 2 in.

842 Stone Ball, Tenn.; very fine, dia. 2 in.

843 Stone Ball, Rhea Co., Tenn.; perfect, dia. 2.

844 Stone Ball, Clay Co., N. C.; very fine, dia. 2¼.

845 Stone Ball; fine, dia. 2⅜ in.

846 Stone Ball; very fine, dia. 2.

847 Hammer, Pa.; of green stone, used for flint chipping. 3 in.

848 Undescribed object, Mason Co., N. C.; beautiful white quartzite, in form nearly cubical but tapering towards one surface, each of the six faces has a deep depression ⅛ to ¼ in. finely wrought and the only example that I have ever heard of. 2¾ x 1⅞.

849 Undescribed, Macon Co., N. C.; quartzite, oval, with pointed ends; perfect. 6 x 3.

850 Undescribed, Mo.; light sandstone wrought into the form of a banner stone, but without the perforation; fine. 5 x 3⅝.

851 Undescribed, Mead Co., Ky.; a cylinder expanding in the middle, tapering towards the ends, one of which is concave, the other slightly convex, finely wrought, *exceedingly rare*. 4¼ x 1½.

852 Undescribed, locality not known: an object in general appearance like the last but of smaller size. 2¾ x 1.

853 Undescribed: an object of metamorphic slate, one end expanding and round, the other nearly pointed, groove near the larger end: perfect. 4¾ x 2⅛.

854 Undescribed, Norfolk, Va.; a curious, not easily described object, somewhat in the form of a pipe; of unknown use, may have been used as a rubbing stone; length 5 in.

855 Undescribed, N. C.; flattened, semi-cylindrical stone with square ends, wrought over the whole surface, and does not seem to have been subjected to use. $3\frac{3}{4}$ x $2\frac{1}{2}$.

856 Undescribed object, Stark Co., O.; in form similar to the last, except that the lower surface is convex, and, together with the ends, is polished; of fine white stone; perfect, *rare*. $3\frac{3}{8}$ x $2\frac{5}{8}$.

857 Rubbing stone, Tenn.; cylindrical, with expanding rounded ends; very fine. $4\frac{1}{4}$ x $1\frac{3}{4}$.

858 Smoothing stone, N. C.; quartzite; circular, flattened; perfect; dia. $4\frac{1}{4}$ in.

859 Rubbing stone, Macon Co.; N. C.; quartzite; oblong with ends and corners rounded; perfect; a pretty object; highly finished; length 2 in.

860 Rub stone, Macon Co., N. C., form much like the last; length $1\frac{7}{8}$ in.

861 Undescribed, somewhat pestle shape; one end round and curved, the other flattened; fine. $8\frac{3}{4}$ x $1\frac{7}{8}$.

862 Undescribed, Ala.; object of slate, in shape like a shoehorn, curved, narrow at one end, at the other expanding to $1\frac{3}{4}$ in. in width. $7\frac{1}{4}$ in.

863 Undescribed, locality unknown; wedge-shape, square head, expanding towards the edge, and the thickness gradually contracting from one end to the other; of dark stone, edge chipped. $9\frac{3}{4}$ x $2\frac{1}{4}$.

864 Undescribed, Swaine Co., N. C.; in shape much like the ordinary grooved axe, broken square below the groove, and with an oval depression at the top. $3\frac{1}{2}$x3.

865 Undescribed, Swaine Co., N. C.; oblong, one end narrower than the other, and both ends deeply notched; fine, *very rare*; length 4 in.

866 Pebble, Clay Co., N. C.; a pretty sample of moonstone found in a grave with pottery and bones.

867 Undescribed, Madison Co., N. Y.; curiously wrought into a form resembling a bird's head. $3\frac{1}{4}$ x $1\frac{3}{4}$.

868 Undescribed, N. C.; form, the square pestle in miniature; perfect. $3\frac{1}{4}$ x $\frac{3}{8}$.

869 Undescribed, Stone object; in shape like an elongated plumb-bob; perfect; length $3\frac{1}{8}$.

870 Tube, Tenn.; presumed to be of pottery, in shape and size exactly like an ordinary dice box; perfect. $3\frac{1}{8}$x$1\frac{3}{4}$.

871 Target Stone, N. C.; of dark massive rock of great specific gravity, egg-shape; perfect, *very rare*. 3 x $2\frac{1}{4}$.

872 Target Stone Milton Co., Ga.; quartzite, perfect, *very rare*. $1\frac{1}{2}$ x $1\frac{1}{2}$.

873 Undescribed, Swaine Co., N. C.; form, a double cone; quartzite, perfect, *extremely rare*. I have had one of these objects, found with a discoidal stone, and exactly fitting the concavities; the two objects had evidently been ground together till perfectly matched. $2\frac{5}{8}$ x $1\frac{3}{4}$.

874 Undescribed, N. C.; quartzite, in form exactly like the last, except that the apex of each cone is flattened a little; perfect. $2\frac{1}{4}$ x $1\frac{1}{4}$.

875 Stone Egg, N. C.; of dark stone, finely wrought and as perfect as though turned in a lathe; the long dia. $3\frac{1}{2}$ in.

876 Stone Egg, N. C.; quartzite; as perfect as the last; long dia. $2\frac{1}{4}$ in.

877 Stone Egg, N. C.; rather oval than ovate; very fine; long dia. $2\frac{1}{8}$ in.

878 Stone Egg, N. C.; of dark stone; perfect. 3 in.

879 Stone Egg, Madison Co., N. Y.; grooved, probably intended for suspension as an ornament; fine. $2\frac{1}{4}$.

880 Stone Egg, N. C.; gneiss, found in an Indian grave; fine. $2\frac{3}{8}$.

881 Stone Egg, Clay Co., N. C.; very fine. dia. $2\frac{1}{4}$.

882 Stone Egg, Clay Co., N. C.; perfect. $1\frac{7}{8}$.

883 Target Stone, Iredell Co., N. C.; hematite; *rare* for form and material, fine. $2\frac{1}{4}$.

884 Plumb Bob, N. C.; egg-shape, with groove near the top; fine. $2\frac{1}{4}$.

885 Plumb Bob, locality unknown; fine. $1\frac{3}{4}$.

886 Plumb Bob, Fla.; fine, *rare*. $2\frac{1}{2}$.

887 Plumb Bob, Mo.; of dark stone, very fine. $2\frac{1}{8}$.

889 Plumb Bob or Double Cone, Mo.; hematite, good, *rare*.

890 Target Stone, hematite, fine, Swaine Co., N. C. $1\frac{1}{4}$ in.

891 Ball, hematite. 1 in.

892 Cone, Macon Co., N. C.; a beautiful little object, of green stone, in form a short cylinder, terminating in a cone; height and dia. $\frac{7}{8}$ in.

893 Disc, Macon Co., N. C.: variegated quartz: perfect. $1\frac{3}{8}$ in.

894 Disc, N. C.; chalcedony, highly polished, double-convex. $1\frac{1}{3}$ in.

895 Ear Ornament, N. J.; oval, pierced for suspension. $1\frac{1}{4}$.

896 Stone, of irregular form, N. C.; pierced to the depth of about one inch. $2\frac{1}{8}$ x $2\frac{3}{4}$.

897 Tube, O.; yellow sandstone, very fine; length $4\frac{1}{2}$, dia. 2.

898 Dish, Anderson Co., Tenn.; soapstone, oval, shallow, a fragment gone from the edge; *very rare*. $6\frac{1}{4}$ x 5.

899 Dish, locality unknown; soapstone, oblong, with handles, has been broken but is neatly mended, and appears to be perfect; so fine a specimen is *extremely rare*. $16\frac{1}{2}$ long, $9\frac{1}{2}$ in. wide, $4\frac{3}{4}$ deep.

THE STONE AGE IN EUROPE.

CELTS, SQUARE CHISELS, AND GOUGES.

ALL OF TRUE FLINT UNLESS OTHERWISE MENTIONED.

I repeat a note made in a former catalogue. "The objects here described are generally termed by European Archaeologists wedges and hollow chisels. I have preferred the term celt and gouge. The word chipped as applied to these implements of flint, does not in any case indicate a defect, but refers to the manner of working the material and is equivalent to flaked as distinguished from polished or pecked."

900 Celt, found by ditching at Harsens, Jutland; the corners show that fine variety of chipping called carving; of unusual size, very fine. 12 x $3\frac{1}{8}$.

901 Celt, Jutland; of beautiful variegated flint, broadly expanded; edge tapers towards the top; very fine. $8\frac{3}{4}$ x $3\frac{1}{4}$.

902 Unfinished Celt, Zealand; blocked out by the striking off of large flakes, edge broad, head quadrangular, rare. $7\frac{3}{4}$ x $3\frac{1}{2}$.

903 Celt, Jutland; polished, cutting edge at both ends; *rare form*, perfect. $7\frac{1}{4}$ x $2\frac{5}{8}$.

904 Celt, Funen; carved corners, edge expanding, head quadrangular; very fine. 7 x $2\frac{1}{2}$.

905 Celt, Veile, Jutland; irregular in form, cutting edge at both ends; fine. $7\frac{3}{4}$ x $2\frac{1}{2}$.

906 Celt, Jutland; dark flint, polished all round, thin, with expanding edge; fine. $5\frac{7}{8}$ x $2\frac{3}{4}$.

907 Celt, Jutland; plowed up; flats polished, sides chipped; flint, shows beautiful colors. 6 x $2\frac{3}{4}$.

908 Celt, Denmark; quadrangular head, chipped, broad at the edge. $6\frac{1}{2}$ x $2\frac{3}{4}$.

909 Celt, Funen; flats polished, sides chipped, head quadrangular, new edge formed by delicate chipping; perfect. 8 x $2\frac{1}{2}$.

910 Celt, Skive, Jutland; found by cutting turf, sides and flats polished; very fine. 6 x $2\frac{1}{4}$.

911 Celt, Jutland; from a marl bed, polished on flats and sides, with new polished edge; $5\frac{3}{4}$ x $3\frac{1}{8}$.

912 Celt, Jutland; of dark flint, polished; very fine. $7\frac{3}{8}$x$2\frac{3}{4}$.

913 Celt, Funen; flats polished, sides chipped, head quadrangular; perfect. 6 x $2\frac{1}{8}$.

914 Celt, Zealand; polished, of light-colored flint; very fine; $5\frac{1}{2}$ x $2\frac{5}{8}$.

915 Celt, Jutland; doubly curved; a most remarkable form; flats polished, fine. $5\frac{1}{2}$ x $1\frac{7}{8}$.

916 Celt, Zealand; thick, polished; head quadrangular. $6\frac{1}{2}$ x $2\frac{1}{2}$.

917 Celt, Funen, broad edge, quadrangular head, carved corners, reddish flint; very fine. $5\frac{1}{2}$ x $2\frac{1}{4}$.

918 Celt, Nyborg, Funen; polished on all sides; of dark flint; thin and very fine. $4\frac{3}{4}$ x $1\frac{3}{4}$.

919 Celt, Zealand; polished on flats and sides, of light flint, thin, very fine. $3\frac{5}{8}$ x $1\frac{3}{4}$.

920 Celt, Funen; polished; $4\frac{1}{4}$ x $1\frac{1}{2}$.

921 Celt, Fredensborg, Zealand; chipped; thin, very fine. 5 x $1\frac{3}{4}$.

922 Celt, Jutland; polished; thin, with square head, nearly triangular; very fine. $4\frac{1}{2}$ x $2\frac{1}{4}$.

923 Celt, Slagelse, Zealand; flats polished; sides chipped, head square, handsome color; uncommonly fine. $6\frac{1}{4}$ x 2.

924 Celt, Funen; polished, of small size; fine. $3\frac{1}{2}$ x $1\frac{1}{2}$.

925 Celt, Jutland; polished flats, curved; rare form. $6\frac{1}{8}$ x $1\frac{7}{8}$.

926 Celt, Zealand; mottled flint, polished, top thin. $5\frac{1}{2}$x$2\frac{7}{8}$.

927 Celt, Zealand; one side has been reduced by chipping, with the apparent design of narrowing the implement; fine and interesting. $4\frac{3}{4}$ x $2\frac{1}{2}$.

928 Celt, Zealand; chipped, thin, narrow at the top; perfect. $4\frac{5}{8}$ x 2.

929 Gouge, Denmark; polished. $4\frac{3}{4}$ x 2.

930 Gouge, Roeskilde, Zealand; chipped, with square head; perfect. 5 x 2.

931 Gouge, Nyborg, Funen; very rude. $3\frac{3}{8}$ x 3.

932 Minute Gouge, Denmark; polished, perfect. $2\frac{1}{2}$ x 1.

933 Gouge or Celt, Denmark; edge but slightly concave, one flat polished, the other also; the edges chipped, fine; a most remarkable specimen. $6\frac{5}{8}$ x $2\frac{5}{8}$.

934 Narrow Chisel, Denmark; chipped, with carved corners, very fine; *rare*. 7 x $\frac{3}{4}$.

935 Narrow Chisel, Funen; polished; very fine. $5\frac{3}{4}$ x $1\frac{1}{8}$.

936 Narrow Chisel, Bogense, Funen; polished, with newly chipped edge; fine. $3\frac{1}{2}$ x $\frac{7}{8}$.

937 Narrow Chisel, Svendborg, Funen; polished, perfect. $3\frac{1}{8}$ x $\frac{5}{8}$.

938 Narrow Chisel, Zealand; black flint, polished, fine, *rare*. $4\frac{1}{4}$ x $\frac{3}{4}$.

939 Narrow Chisel, Funen; chipped, wedge-shape, curious. 3 x $\frac{3}{4}$.

940 Narrow Chisel, Denmark; of extra large size, chipped with polished edge; very fine. $8\frac{5}{8}$ x $1\frac{1}{4}$.

941 Narrow Chisel, Sweden; chipped; very fine. $6\frac{1}{4}$ x 1.

942 Flint core from which knives have been flaked, Denmark; very fine. $6\frac{1}{8}$ x $2\frac{1}{4}$.

943 Celt, Norway, from Lake Miosen: of diorite or some similar material; fine and *rare*. $3\frac{3}{4}$ x $2\frac{1}{4}$.

944 Celt, Armagh, Ireland; dark stone; fine, *rare*. $3\frac{3}{4}$ x $2\frac{1}{8}$.

945 Celt, Ireland; material like the last: fine, *rare*. $5\frac{1}{8}$ x $2\frac{1}{8}$.

946 Celt, Ireland; dark stone, like jasper; fine, *rare*. $3\frac{1}{2}$ x 2.

947 Celt, Norway; of hard greenish stone; fine, *very rare*. 4 x 2.

948 Celt, England; dark stone; good, scarce. $4\frac{1}{4}$ x $2\frac{3}{4}$.

948*a* Celt, Lough Neagh, Ireland; fine, *rare*. $3\frac{3}{8}$ x 2.

949 Celt, Ireland; fine, *rare*. 4 $1\frac{7}{8}$.

950 Celt, Germany; square sides, partly pecked, partly polished; fine, *very rare*. $6\frac{1}{2}$ x $2\frac{3}{4}$.

951 Celt, Denmark; granite, square side, expanding edge, top thin; fine, *rare*. $7\frac{5}{8}$ x 3.

952 Celt, Jutland; granite, fine, *rare*. $6\frac{1}{4}$ x $2\frac{7}{8}$.

DAGGERS, KNIVES, SPEAR HEADS, LANCES, ETC.

Among the objects here described are specimens of most of the forms peculiar to the North of Europe. For beauty of form and delicacy of workmanship these cannot be excelled. No such collection, with one exception, has ever been offered for sale in this country, and it would be very difficult to match many of them abroad. For those who are familiar with similar objects, no account of the beauty of the workmanship is required; to those who are not thus familiar, it is not easy to convey an adequate idea of its perfection. The material is true flint of rich and variegated colors, the different examples showing nearly all shades from black to white.

953 Lance Head, Jutland; beautifully wrought, edge serrated. $7\frac{1}{4}$ x $\frac{7}{8}$.

954 Dagger, Denmark; blade broad, handle contracted; very fine. $7\frac{1}{4}$ x $1\frac{5}{8}$.

955 Lance Head, plowed up at Veille, Jutland; edge serrated, perfect and rare. $7\frac{3}{8}$ x $1\frac{1}{8}$.

956 Elliptical Lance Head, Jutland; a trifle curved; a beautiful implement. 7 x $1\frac{3}{4}$.

957 Elliptical Lance Head, Sweden; edge serrated, perfect; of very graceful form. 5 x $1\frac{1}{2}$.

958 Lance Head, Nyborg, Funen; pointed, expanding in the middle, base square; the Danish invoice states this form to be "*very rare*," a trifle nicked, very fine. $6\frac{3}{4}$ x $1\frac{3}{4}$.

959 Thick Lance Head, Sweden, of extra workmanship; perfect. $7\frac{1}{2}$ x 1.

960 Spear Head, Clarksville, Tenn.; placed here on account of its remarkable resemblance to Scandinavian implements. $4\frac{1}{2}$ x $\frac{3}{4}$.

961 Lance, Denmark; perfect. 6 x 1.

962 Lance Head, Zealand; of unique form, doubly curved and finely wrought; perfect. $6\frac{1}{4}$ x $1\frac{1}{8}$.

963 Great Arrow Head, Henning, Jutland; an arrow head is one of the rarest of all north of Europe relics; this is a very fine example. $4\frac{1}{4}$ x $1\frac{1}{4}$.

964 Dagger, Germany; partly polished; perfect and *rare*. $6\frac{1}{4}$ x $1\frac{3}{8}$.

965 Lance Head; Germany; very fine. 7 x $1\frac{1}{4}$.

966 Lance Head, Germany; very fine. $7\frac{3}{8}$ x $1\frac{1}{8}$.

967 Semi-Lunar Knife, Funen; taken from a little tumulus at Bogense; perfect, *rare*. $5\frac{3}{4}$ x $1\frac{5}{8}$.

968 Large, elliptical Spear Head or Lance, Jutland; found in cutting turf; translucent, clouded flint, a beautiful implement. 6 x 1⅜.

969 Semi-lunar, or rather elliptical Knife; one edge serrated, partly polished, perfect, *rare*. 6¼ x 1¾.

970 Semi-lunar Knife; Glostrup, Zealand; very good. 4¼ x 1⅜.

971 Semi-lunar Knife; Island Oro, found by ditching; narrow, very fine, of dark clouded flint, *rare*. 6 x 1⅛.

972 Semi-lunar Knife, Randers, Jutland; fine. 3¾ x 1⅜.

973 Semi-lunar Knife, Skive, Jutland; called by the Danish dealer a "skin scraper," fine. 2¾ x 1.

974 Semi-lunar Knife, Jutland; very fine. 4¼ x 1¼.

975 Elliptical Lance Head, Germany; fine. 4⅞ x 1¼.

976 Narrow Lance Head, plowed up on the island Mars, Jutland; narrows from the middle towards the point; the Danish invoice says, "Rare flint sort," very fine. 4⅛ x ⅞.

977 Barbed Harpoon, found by ditching, Denmark; a fine and *rare* example. 4¼ x 1¼.

978 Flaked Knife, Viborg, Jutland; fine. 5⅜ x 1.

979 Flaked Knife, Denmark. 5 x 1⅝.

980 Flint Knife, France; good and *very rare*. 5 x 1½.

981 Flint Knife, Denmark. 3⅝ x ⅞.

982 Narrow flaked flint Knife, Denmark; curved and serrated; fine, *rare*. 5½ x ⅞.

983 Flaked flint Knife, Denmark. 5½ x ¾.

PERFORATED AXES AND HAMMERS.

Nearly all are of granite.

984 Hammer-axe, Denmark; curving inward, expanded in the middle; fine. 4½ x 2.

985 Hammer-axe, plowed up at Bogense, Funen; form like the last; very fine. 5 x 2¼.

986 Hammer-axe found in turf, Jutland; handsome form, expanding both at top and edge; approaches in form the so-called Amazon axe; very fine. 4¼ x 1½.

987 Axe from the little Island of Oro; wedge shape with rounded head, perfect. 4⅝ x 1¾.

988 Hammer, found in a great moor in Jutland; slightly curved; very ancient and fine. $5\frac{1}{2}$ x 2.

989 Hammer, Viborg, Jutland; nearly elliptical; fine. $4\frac{3}{4}$ x 2.

990 Hammer, Zealand; much elongated, with perforation near the head; its appearance proves its great antiquity; fine. $6\frac{3}{4}$ x $1\frac{5}{8}$.

991 Hammer, Jutland; perforation uncommonly large and near the centre; fine. $3\frac{7}{8}$ x $2\frac{1}{4}$.

992 Hammer, Holbak, Zealand; of large size, perforation oblique to the edge; fine. $6\frac{3}{4}$ x $2\frac{5}{8}$.

993 Hammer-axe, Slangerup, Zealand; edge narrowed, head rounded, fine, a trifle chipped. 5 x 2.

994 Hammer, Jutland; of handsome form and finished, with the exception of the perforation, which is not commenced. $6\frac{1}{4}$ x $2\frac{3}{8}$.

995 Hammer, Zealand; edge expanded and head narrow and rounded, perforation not commenced; fine. $5\frac{3}{8}$ x 2.

996 Hammer, Funen; perforation commenced at one side, extends about half through; of extra size; $8\frac{1}{4}$ x $2\frac{5}{8}$.

997 Hammer, Zealand; of dark stone; polished; broken at the perforation and a new perforation commenced from each side. $3\frac{7}{8}$ x $1\frac{7}{8}$.

998 Hammer, Viborg, Jutland; head rounded; fine form and good work. 6 x 2.

999 Hammer, Funen; triangular, broken at the perforation and newly finished; good. $2\frac{1}{2}$ x $1\frac{1}{4}$.

1000 Hammer, Hyllested, Zealand; in form somewhat rhomboidal; perforation of extra size and near the edge; fine and a *very rare example*. $4\frac{1}{4}$ x $\frac{1}{4}$.

To Collectors of Pre-Historic Objects.

The undersigned is at all times desirous of purchasing for cash, fine specimens of all the rarer forms of Stone Implements, such as Amulets, Banner Stones, Gorgets, Pendants, Tubes, Pipes, Spades, Hoes, Discoidal Stones, Plumb-bobs, Slung Shots, Long Pestles, &c., &c.

All objects in Hematite especially desired—Celts, Axes, Spear Heads, Arrow Points, Mullers, Plumb-bobs, &c.

Ancient Copper Implements of every form will be purchased at liberal prices.

Will buy collections of any magnitude, large or small, if of fine quality; inferior and defective pieces not wanted.

Has now for sale in large quantity and great variety, objects of American and European origin; amongst the latter a fine assortment of Scandinavian relics of true flint, such as Celts, Gouges, Daggers, Lances, Spear Heads, Poniards, Semi-lunar Knives, Oyster Knives, Flaked Knives, &c. Also, in Granite,—large Celts or Axes, perforated and Grooved Hammers, Celts pierced for suspension, &c., &c.

Also, small objects of various materials,—Beads, Spin Stones, Sling Stones, Sinkers, &c. &c.

In the American department, the assortment is not less varied and complete.

Amongst the European pieces, scarcely one is blemished or defective; but from the numerous American collections bought, many pieces, more or less imperfect, remain; all such will be sold at most moderate prices.

Correspondents are requested to address orders or other favors as below until October 14. Any letters not likely to reach me by that date should be sent care of Messrs. Bangs & Co., 739 and 741 Broadway, New York City, and orders should be forwarded in season to arrive as early as Oct. 18.

After the sale priced copies of the catalogue, printed on heavy tinted paper specially for collectors, will be mailed to order for 75 cents each. Priced catalogues may still be obtained of the Clogston, Wooley, Jenison, Hitchcock and Ralston collections.

W. ELLIOT WOODWARD,

258 Dudley Street, Roxbury, Mass.